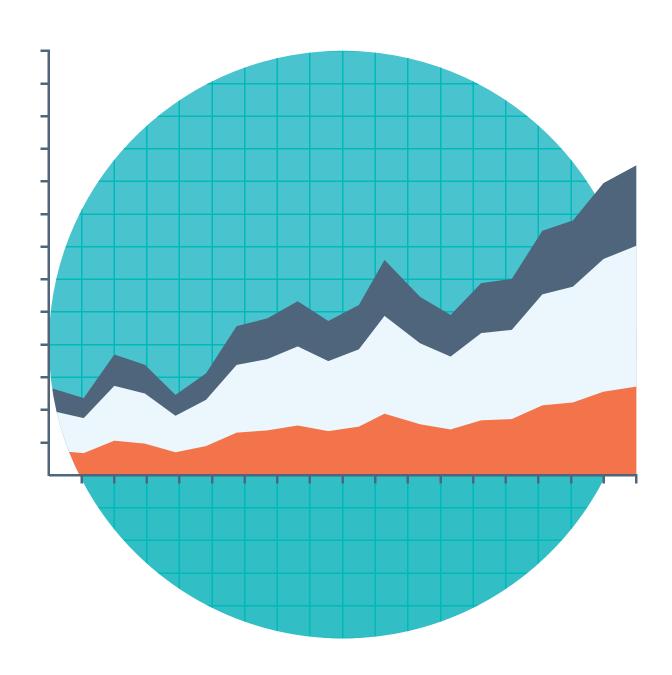
Deloitte.Access Economics

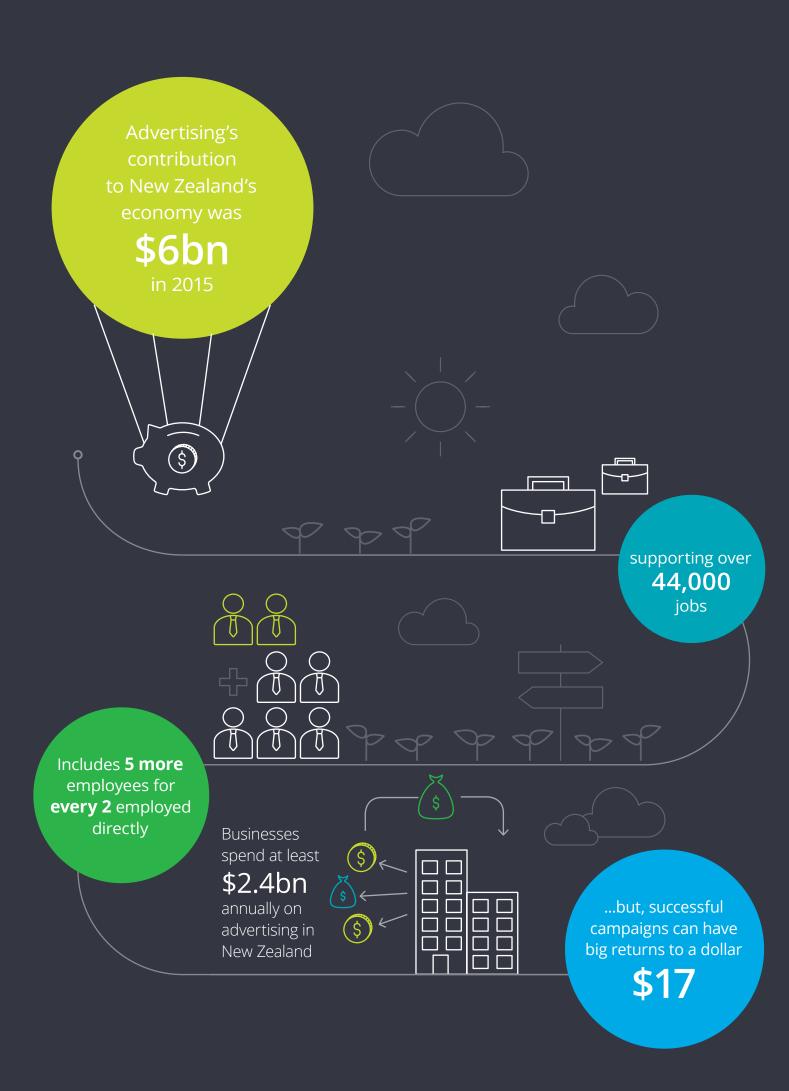


Advertising Pays

The economic, employment and business value of advertising

The Commercial Communications Council 2017





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Executive summary

Advertising is a critical way for businesses to connect with customers and drive revenue growth. Investments in advertising can deliver strong returns for business, and in an environment with changing customer preferences and disruptive technologies, businesses can also use advertising to achieve their strategic objectives.

Advertising also plays an important role in our economy and society. The industry is a significant employer in its own right and advertising is a critical driver of competition, lower prices, and productivity growth. It can help governments connect with the public and drive behavioural change.

We estimate that advertising in New Zealand was worth 2.4% of GDP, or \$6 billion in 2015. This is a significant economic contribution, roughly equivalent to what tourists spend in New Zealand every six months. Furthermore, the advertising industry is a significant employer. Over 44,000 jobs are supported by advertising in New Zealand, including over 12,000 people directly employed in advertising.

This report re-examines advertising's role in contributing to business success in a changing economic climate, based on insights from New Zealand's business leaders.

The advertising industry can be typecast as simply the final stage in the customer sales strategy; but in fact, it can also play a significant role in the core of corporate strategy. The industry includes over 1,000 professionals who specialise in marketing and public relations, who can provide deep insights throughout the product lifecycle.

In the short term, advertising can be viewed as cost. However, it can have a significant return, for example Effie winning advertising campaigns in New Zealand in 2015 returned \$17 in sales revenue for every \$1 of advertising expenditure (Nielsen & CAANZ, 2016). It is also an investment in the company's brand asset. This can be a business's most valuable asset; New Zealand's top 10 brands were collectively valued at \$4.7 billion in 2012.

In a fragmented media market, reaching the right target audience in the most effective way is instrumental to an advertisement's success. Agencies with a deep understanding of customers and markets can help businesses design advertisements and media strategies that are more likely to succeed.

In New Zealand, businesses have access to some of the most creative advertising agencies in the world. In 2015, Auckland was ranked fourth in the Cannes Lions Global Creativity Report as a highly creative city – ahead of hubs like Tokyo, Bangkok and Sydney.

Other potential audiences for advertising – like suppliers, investors and staff – should not be ignored. For example, sales workers represent almost one in ten employees in New Zealand. Informing and engaging with these customer-facing staff can be an effective way of building a common sense of purpose, and engaging and communicating with the organisation's customers.

Finally, government objectives can be aided by advertising. Advertising has a wide reach and can portray safety and social change messages effectively. This ability is demonstrated through campaigns such as the successful 'Legend' drink-driving campaign.

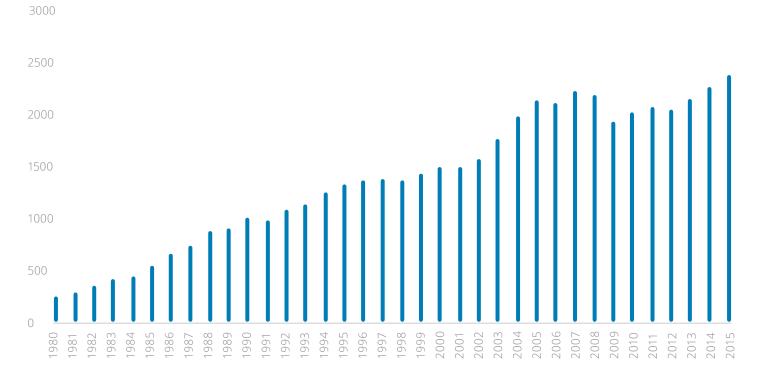
Advertising generates growth

Annual expenditure on advertising in New Zealand is significant, worth \$2.4 billion or almost 1% of GDP in 2015. During the period from 1980 to 2015, Advertising expenditure has been growing, on average, at a rate of over 7% a year in nominal terms.

The positive impact of advertising on the economy is much bigger than direct spending. It facilitates competition in the market, inspiring innovation, and improving efficiency and productivity. Advertising provides incentives for businesses; to offer better products or services, or at lower prices, and to win market share.

This provides benefits to consumers and the economy. By providing information to consumers, advertising helps buyers compare different products and services and make informed choices. Evidence shows that this strong competitive force ultimately leads to lower prices

Chart i: Real advertising expenditure in New Zealand (\$ million), 1980-2015



Source: ZenithOptimedia

for consumers.

The annual benefits of advertising to the New Zealand economy were worth \$6 billion in 2015, in addition to direct spending on advertising.

That is, as a result of advertising activity, the New Zealand economy was \$6 billion larger through great innovation by businesses, more productive use of resources, and lower prices for consumers, driving more economic activity. This is in addition to the \$2.4 billion spent annually on advertising. This is a significant impact, with \$6 billion being equivalent to six months' worth of spending by international tourists in New Zealand.

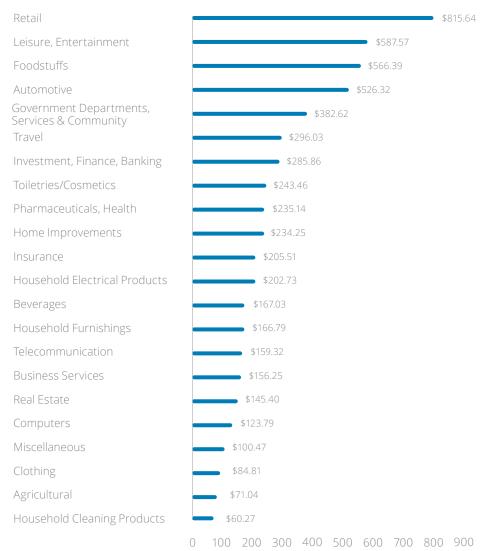
Increasing spending on advertising can be used to drive economic growth. Based on analysis in this report, for every dollar spent on advertising in 2015, GDP is expected to increase by around 13 cents in the following year (in addition to the extra dollar spent). If the increase in advertising expenditure is sustained, the long run impact will be greater.

These benefits to the New Zealand economy are in turn the result of industries spending money on advertising. The largest economic benefits of advertising are generated from the retail sector, worth over \$800 million in 2015, as shown in Chart ii. The leisure and entertainment industry, as well as foodstuffs and automotive, also contribute nearly \$600 million each of the \$6 billion total economic benefit of advertising.

While advertising is a significant driver of economic growth and creates value for consumers, it is important to recognise that it also imposes costs. These include the time lost by individuals as they are exposed to advertisements, the potential for artificial differentiation and the downsides of excessive consumerism.

Misleading or offensive advertisements can lead to erroneous perceptions and dissatisfaction among consumers, inducing decisions that ultimately decrease individual or social welfare.

Chart ii: Contribution of advertising to GDP by industry (\$ million), 2015



Source: StatsNZ (2016); Deloitte Access Economics calculations

In rare cases, advertisements could have significant costs through encouraging problematic behaviours, such as irresponsible alcohol consumption or gambling. Regulators play an important role in managing these costs and impacts.

Advertising supports jobs

Advertising is associated with the employment of **over 44,000 people** in the New Zealand economy. For every two people who are directly employed in advertising, one is employed in the advertising supply chain, and four are employed in industries where advertising provides significant financial support.

There were 12,412 full-time equivalent (FTE) jobs directly created by advertising in 2013. This is similar in size to employment in the motor vehicle industry (13,703), postal, courier, pick-up, and delivery services (12,234) or in insurance and superannuation funds (10,764).

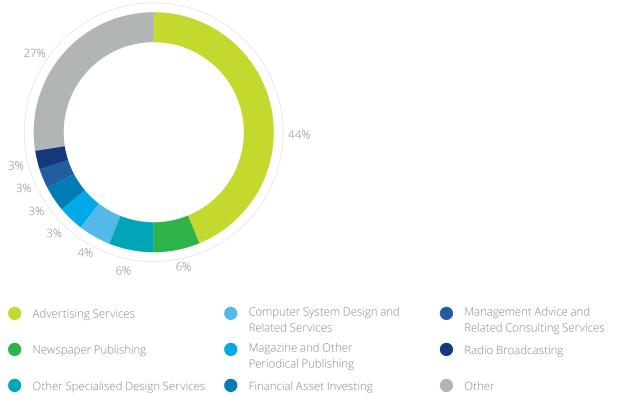
Just under half of these jobs were in traditional advertising services businesses; more than 6,000 were spread across the economy in other industries, ranging from publishing and design to management advice and financial investing.

We estimate that a further 5,341 FTE employees were indirectly employed as part of the adverting upstream supply chain. This includes business services such as software design (used by advertising agencies in the development of creative content) and human resources (used by agencies for recruitment).

Additionally, some industries rely on advertising as a source of revenue. For businesses in content generation (like graphic designers and film producers) and media (including television and radio), advertising agencies are a key customer. We find that 26,421 FTE individuals were employed in occupations supported by advertising revenue.

In total, this means that for every two people directly employed in advertising in New Zealand, there are around five more people employed in the advertising supply chain and advertising-supported industries.

Chart iii: Industries that advertising professionals work in, 2013



Source: StatsNZ (2016); Deloitte Access Economics calculations.

Figure i: The employment impact of advertising

For every...

















people employed in advertising...

...one is employed in the **supply chain**

and four are employed in supported industries

Source: Deloitte Access Economics

Advertising pays: insights for business and for government

Advertising is an important component of a business's corporate strategy, allowing businesses to engage with customers and spread their messages to a wide audience. It can also help governments achieve a wide range of public policy objectives.

Beyond just selling a product, advertising agencies can help to build a brand profile for a business, using their broad industry knowledge to design products which appeal to the target market, and advising on consumer appetites and the right combination of channels to make maximum impact in a market.

Leveraging these opportunities can pay significant dividends, not just for the business, but for consumers, government, and the economy more broadly.

For this report we reviewed several high profile ad campaigns and interviewed New Zealand business leaders at Air New Zealand, Holden, Tourism NZ, and Mitre 10 to understand the role that advertising can play in achieving business goals.

The key insights from our research and interviews are:

Advertising helps deliver business objectives

Advertising, at its core, is about generating revenue for businesses by helping to sell and distribute the products they make. Although it has a far wider reach within a business, its central aim is to promote business sales, awareness, and help grow market share, and it can be very effective at this. Effie winning advertising campaigns in New Zealand in 2016 returned \$17 in sales revenue for every \$1 of advertising expenditure (Nielsen & CAANZ, 2016).

2. Advertising has a broader role to play in corporate strategy

As consumers have access to more information about products and services, and become increasingly sophisticated at contextualising information, it is more important than ever to ensure that those products, services and customer experiences deliver clear and consistent expressions of a firm's brand. Customer-facing advertising agencies have a role to play at the core of business strategy.

3. Advertising is an investment in brand

In a world with increasingly more choice available to consumers, brand can be an essential ingredient for market differentiation. It can be a business's most valuable asset, providing an effective way to build market share and grow a business. In 2012, Brand Finance estimated New Zealand's top 10 brands to be collectively worth \$4.7 billion based on what those companies would be willing to pay to licence their brands if they did not own them. As a highly visible and direct form of brand communication, recognising advertising's strategic role is critical in tailoring content and the planning of its delivery.

4. Know your customer and the best channels to reach them

Increasingly, the effectiveness of advertising is determined by how well it is targeted; content alone is no longer enough to ensure success. The right mix will vary according to the strategic objectives of a business; expert advice can assist to ensure maximum impact. Rarely will a one-channel strategy – digital or otherwise – serve a brand's best interests. For example, 69% of the 3.5 million New Zealanders who watch TV every week do so via a television set (Nielsen, 2016).

5. Creativity is critical for advertising

The success of a marketing campaign also depends on the extent to which content conveys an engaging message that audiences retain. Portraying the role of business through a 'human' lens remains important for communicating the values behind a brand, an area of increasing importance for consumers when determining their loyalty over the longer term. New Zealand's advertising agencies are repeatedly recognised on the world stage for their creativity. By harnessing this strength, businesses can optimise the effectiveness of their investment and campaigns.

6. Don't overlook other audiences

Advertising that is focused on building awareness of a brand's greater purpose and meaning can not only strengthen customer relationships, but can also positively impact on employee engagement, talent attraction, supply chain connections, and shareholders. For example, Chemmanur and Yan (2010) find that, based on stock turnover patterns immediately following an IPO, "an IPO firm could increase its offer price to gain a valuation premium of 1.5% to 3% relative to its intrinsic value if it increases its advertising intensity by 1%."

Advertising can achieve for broader social objectives

Public sector advertising is best when employed transparently in the pursuit of outcomes for the public good. It can be a tool in the arsenal of policy making as part of a complementary, integrated suite of measures. For example, the 'Legend' drink driving campaign ran for three years and was highly successful – the number of young people caught over the limit halved, and number of young deaths on the roads fell from an average of 214 before the advertisement to 145 after the advertisement.



"Everyone is competing for customers. The challenge is to work out how to use advertising to compete most effectively – how to attract attention, and to convert to sales."

Annabelle Fowler

General Manager of Market Development and Retail Sales, Air New Zealand

"Advertising forms a big part of how we communicate what we offer and who we are. Increasing sales is only a small part of this overall strategy."

Marnie Samphier

Chief Marketing Manager, Holden N

"...making sure advertising is appropriately targeted – that the right people are seeing it at the right time in the right medium for them – can be a more cost effective way of delivering a more powerful message."

Kevin Bowler

CEO, Tourism NZ

"You can clearly see the cause and effect – a couple of days after launching an ad we see sales increase by 15%... when we take our staff through e-learnings, sales increase further, reaching up to 65% because staff are more equipped to help our customers."

Dave Elliott

General Manager of Marketing, Mitre 10

"Brands need to explain themselves and give audiences a reason to care. All the science in the world won't, in the end, convince people to stop smoking, vote, buy a soft drink, have safe sex, or choose one bank over another. You have to persuade them. And in the art of persuasion, the most powerful instrument is creativity – the currency of ideas."

David Redhill

Partner, CMO, Deloitte



Introduction

Advertising plays an important role in our economy and society. For individuals, advertising improves access to information. For business, it is a means of communicating with customers and positioning in the market. Advertising also helps governments to connect with the public and drive behavioural change.

Beyond these direct impacts advertising has broader economic impacts. It facilitates competition in the market, inspiring innovation, and improving productivity. And evidence shows that this can ultimately lead to lower prices for consumers (Tellis and Amber, 2007, and Milyo and Waldfogel, 1999).

For as long as people have traded goods and services, sellers have used advertising to provide information to potential customers. But as markets have evolved, so has advertising. From outdoor carvings in the ancient world to individualised and targeted social media messages today, advertising has always been innovative and adaptive – quick to leverage new mediums and respond to the changing tastes of consumers.

For businesses, this understanding of what customers want can pay big dividends. By addressing these needs using creative thinking, advertising can do more than just encourage sales – it can add value throughout the supply chain, and build brand.

Advertising improves information provision, and can ultimately lead to lower prices for consumers

Tellis and Amber (2007)

The Commercial Communications Council engaged Deloitte Access Economics to examine the value of advertising to the New Zealand economy. Our analysis measures these impacts in terms of economic activity and employment. It also discusses how business can use advertising to achieve strategic objectives.

1.1 What is advertising?

The lines between marketing, selling, and providing services are blurring. Businesses now have the opportunity to do all three simultaneously across a wide variety of channels.

Advertising is no longer limited to paidfor slots on broadcast media like radio, television and newspapers, out of home advertising, and direct mail.

Businesses can now reach consumers directly through 'owned' channels of communication – ranging from business websites and blogs, to videos and social media. And though 'earned' advertising mechanisms – like word-of-mouth and endorsements – are old, they now have broader reach than ever. Social media and review services and platforms can magnify and amplify individual experiences.

In this context, this report employs a broad definition of advertising, encompassing communications through paid, owned, and earned media, proposed by Jeremy Bullmore in 1983, shown on the bottom of this page. This definition is consistent with previous work by Deloitte in the UK in 2012, 2014, and 2015, and in Australia in 2016.

The focus of this report is advertising that is intended to draw consumer interest in brands, products and services, or to change consumer behaviour in some other way. While broader marketing and communications functions, such as public relations, are increasingly integrated with advertising today, they are not central to this analysis and not captured in the advertising spend figures used.

Advertising agencies are businesses dedicated to creating, planning, and handling advertising and other forms of marketing and promotion for clients. Throughout this report, we refer to the use of advertising agencies by other businesses, and the services these agencies offer - including building a business's brand, assisting in development of corporate strategy, and finding creative ways to reach target audiences and deliver on a business's objectives.

"Advertising is any paid-for, owned, or earned communication intended to inform and/or influence one or more people"

Adapted from Bullmore (1983) in Deloitte Access Economics (2016a)

1.2 Outline of this report

This report analyses the effect that advertising has on the New Zealand economy. We consider the benefits that advertising brings to the economy through information provision, encouraging innovation, stimulating competition, lowering prices, and generating and supporting jobs. The remainder of the report is structured as follows.

Chapter 2 considers the direct and indirect economic benefits of advertising expenditure in New Zealand. We use an augmented Solow-Swan model to estimate the impact that advertising spend has on productivity in the economy, and the extent to which the economy is larger than it would otherwise be because of advertising.

Chapter 3 examines and quantifies the employment supported by advertising in New Zealand. This is divided into three categories: those directly employed by the advertising industry (for instance advertising professionals), those employed in sectors which supply the industry (software designers), and those whose employment is supported by the industry (newsreaders and sportspeople).

Chapter 4 discusses the importance of advertising for businesses, and the benefits that arise from its use. Our industry consultations reveal key insights about the value of advertising to a business and the importance of brand.

The report also includes a technical appendix, which details the modelling used in Chapter 2 to quantify the indirect economic impact of advertising in New Zealand.

1.3 Approach

We have combined research from a number of areas for this report. The evidence base comes primarily from:

Literature review – We conducted an extensive literature review of academic papers and industry research to develop a picture of the benefits and costs that arise from advertising for business, government, and society. This review also helped to inform the methodology used to analyse economic growth and employment data in the New Zealand context.

Data collection and analysis – Data used in this report comes predominantly from freely available information sources such as the World Bank, OECD, UNESCO, and Statistics New Zealand. This was supplemented with bespoke data from Statistics New Zealand, ZenithOptimedia, and Nielsen AIS. These data sources were used to create a time-series panel of economic growth indicators such as GDP, population, education levels, and advertising spend across 35 countries, as well as detailed data on employment in New Zealand.

Econometric modelling – We used an augmented Solow-Swan growth model to estimate the impact of advertising on economic growth. More information on this model is available in Appendix A.

Industry consultations – We conducted consultations with senior business leaders in order to gauge businesses perceptions of advertising. These consults focused on the role of advertising, how advertising budget is allocated, how the success of a campaign is determined, and views on advertising agencies versus inhouse capabilities.







Some of the biggest contributors by industry are



Retail



Leisure & Entertainment



Foodstuffs

Economic value

The advertising industry is a significant part of the New Zealand economy.

Expenditure on media advertising alone was worth \$2.4 billion in 2015.1 By investing in advertising, organisations create value for themselves. And beyond driving revenue and customer engagement, advertising agencies can support a better understanding of customer needs, inform corporate strategy, and bolster brands, as detailed in Chapter 4. This expenditure also supports employment - directly in the advertising industry, but also more broadly through New Zealand's creative and media industries, which receive a significant proportion of their revenue from advertising.

Beyond the direct impacts, advertising enhances competition, productivity, and innovation across the economy. This has delivered far more substantial benefits; in 2015 these were worth around \$6 billion to the NZ economy (or 2.4% of GDP), equivalent to what international tourists spend in New Zealand every six months. This contribution is in addition to direct spending on advertising. This chapter quantifies the value of advertising to the New Zealand economy in terms of its impact on gross domestic product as a result of greater market efficiency and growth. There is value beyond what is captured in this model however, specifically greater consumer surplus and better outcomes in non-market sectors such as health and education. These are discussed later in this chapter.

Advertising expenditure

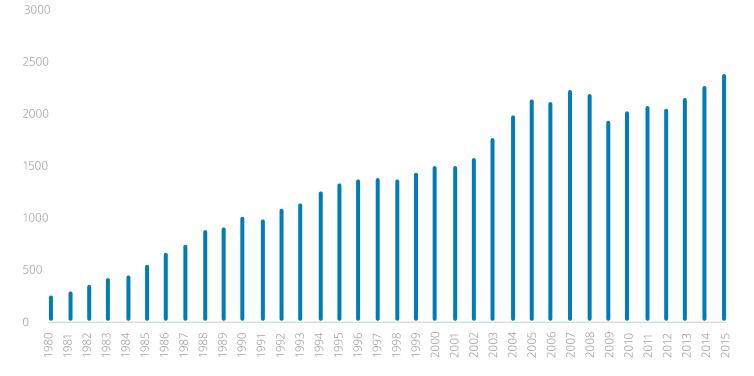
Advertising expenditure was \$2.4 billion in 2015. We use this ZenithOptimedia estimate for modelling because it allows for international comparison. It is also broadly consistent with the most recent Advertising Standards Authority estimate of \$2.38 billion in 2014 (ASA, 2014), though more up to date.

We note that the size of advertising is likely to be even larger, because advertising spend does not include all production costs, such as the revenue earned on creating advertising content. Production costs can be very significant. According to estimates from the Commercial Communications Council, net revenue of communications agencies (that is, revenue to the creative agency on total sales of creative services, less payments for production) is around \$300 million, and total payments by clients (which include production costs) are approximately 3-4 times net revenue.

This would imply that revenues from the production of content are around \$1 billion annually, in addition to the \$2.4 billion of advertising expenditure. This would take total advertising expenditure to over \$3 billion, highlighting the significance of this sector to the economy.

This figure is based on ZenithOptimedia advertising expenditure estimates which include all expenditure on newspapers, magazines, TV, radio, outdoor, cinema, and internet. The data is calculated
after discounts and excluding production costs, but including agency commission, classified advertising for newspapers and internet (but not magazines), and including display/classified/search/mobile
internet advertising.

Chart 2.1 Real advertising expenditure in New Zealand, (\$ million), 1980-2015



Source: ZenithOptimedia (2015)

2.1 How advertising delivers economic benefits

Advertising expenditure grew substantively in real terms over the three decades to the GFC (see Chart 2.1). However, a decline in spending after the GFC raised broader concerns about the industry's overall trajectory, particularly in light of the disruptive force of new digital channels, enabling and facilitating an increase in owned and earned advertising. However, the industry has since recovered; in fact, 2014 and 2015 saw real expenditure reach historic highs. Clearly, the drop in spending during the GFC was cyclical, and does not reflect a broader structural change.

Advertising expenditure in New Zealand in 2015 was \$2.4 billion² (or 0.97% of GDP). This is a conservative estimate because data limitations mean that it is based on paid channels only. These include newspapers, magazines, TV, radio, cinema, outdoor and online display, classifieds, and search payments, but not other, unpaid forms of advertising such as word of mouth or social media posts by customers. It also excludes spending on the production of advertising, such as money spent on the development of creative content. Thus, total spend is likely to be larger than \$2.4 billion, but due to data limitations only the expenditure on advertising (in terms of media spend) is modelled in this report.

This spending supports employment in the advertising industry directly, as well as flow-on employment through creative and media industries, as discussed in Chapter 3.

Evidently, investing in advertising can provide a direct return for businesses and government – whether that be increased sales, engagement with customers, broader social outcomes, or other benefits, as explored in Chapter 4.

But even businesses and individuals who don't directly invest in advertising can benefit from it. This is because advertising enhances competition, productivity, and innovation across the economy.

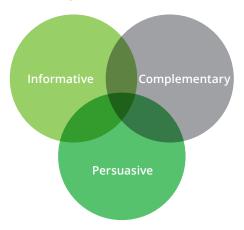
It does this through three mechanisms (Bagwell, 2005) presented in Figure 2.1.

- Informative as markets are often characterised by imperfect information (i.e. consumers do not always know of a product's existence, price, or quality), advertising promotes competition and lower prices by providing this information at a minimal cost to consumers.
- Complementary advertising is complementary to the products being consumed. For example, consumers may value the 'social prestige' that is derived from the advertising of a particular product.
- Persuasive advertising shifts
 consumer preferences and enhances
 product differentiation and brand
 loyalty. As a result, firms can charge
 higher prices for their products due
 to reductions in the price elasticity
 of demand.

These impacts all flow through to improved productivity in the economy, and higher overall economic activity.

But quantifying them in practice is a challenge. Each advertisement is unique, with its own goals and impacts. As such, there is no generic way of measuring the cumulative impact of advertisements - each will differ on a case by case basis.

Figure 2.1 Mechanisms by which advertising works



Many studies, dating back to the 1950s, have linked a range of business performance indicators such as sales, profit, and price. And, as detailed in Chapter 4, advertising can also contribute to broader business objectives. The effectiveness of advertising as a means of achieving business objectives is well-established.

However, studies that focus on firm level analysis are of limited use for explaining advertising's long term contribution to broader economic development. Advertising is highly combative in nature, and a unilateral increase in advertising by one firm often leads to reciprocal increases by its competitors. This causes contemporaneous positive relationships between advertising and business performance, so advertising's impact cannot be isolated and wider conclusions as to the value of advertising cannot be drawn.

Recent work suggests that the analysis of advertising should look at the performance of the economy as a whole, including the effects on growth and market efficiency, rather than individual firms.

However, the defining work in this space was predominantly completed earlier, in particular the work of Nobel-winning economist Clive Granger (Ashley et al., 1980) that found a positive relationship between advertising and aggregate consumption³ epitomises this body of literature.

^{3.} The paper found that an increase in advertising spend led to an increase in aggregate consumption in the economy, suggesting that advertising generates consumption.

As such, recent literature focuses on broader economy-wide methods to quantify the impact of advertising. Specifically market efficiency and growth, consumer surplus, and non-market sectors. These are discussed in more detail below.

2.1.1 Market efficiency and growth

As previously established, advertising impacts the economy in a number of different ways, and so attributing a uniform approach to quantifying its effect can be misleading. The major ways that advertising impacts economic efficiency are (Deloitte Access Economics, 2016a):

Pushing price competition – Firm advertising translates to low-cost information about the market for consumers. The more information available, the more efficient the market, demand becomes increasingly responsive to price. This promotes competition between firms and pushes prices for consumers down. Further, advertising can help facilitate market entry as it provides a means through which new entrants can publicise their existence, prices, and products, and establish market share (Tellis and Amber, 2007).

Encouraging innovation – In today's increasingly globalised marketplace, businesses need to find new ways to stand out from the crowd and meet consumers' needs. A strong advertising industry helps companies to continually improve their service and differentiate themselves from their competitors, and this contributes to the advancement of technology and improved products. Innovation is critical for business growth as well as broader economic growth, and advertising is a strong driver of that.

Signalling quality – Product quality information is essential to a strong and efficient market (Dukes, 2008). Conveying product quality is not always easy, for instance if differences will only be noticed over time, and advertising can be used to overcome these difficulties.

Building on the notion that advertising promotes competition, boosts consumption, and increases consumer awareness about products, numerous studies have attempted to value the contribution of advertising to economic growth. McKinsey & Company (2012) estimated that advertising has fuelled 15% of GDP growth on average across G20 countries over the period 2002 to 2010 by generating new business. Taking data on each of the G20 countries' growth rates, consumption and investment rates, and advertising expenditure over the period, the report used a Solow macroeconomic model to estimate the extent to which increasing advertising expenditure grew GDP.

Deloitte LLP (2012) augmented a standard economic growth model to include advertising as a determinant of GDP growth and found that a 1% increase in advertising expenditure leads to a 0.07% increase in GDP per capita in the UK, relying on data from 1998 to 2011.

In Australia, it was estimated that advertising generated \$40 billion worth of benefits in 2014 (Deloitte Access Economics, 2016a). This was based on an earlier version of the model employed in this report, and used data from the OECD from 1980-2014.

2.2 Advertising's impact on the economy

Beyond the direct benefits of investing in advertising (detailed in Chapter 4) and the associated employment in the industry (as discussed in Chapter 3), advertising plays an important role in driving economic growth.

While a number of empirical studies have established a link between advertising expenditure and economic activity, this analysis fills a gap in the evidence base by quantifying the benefits in the context of the New Zealand economy. To do this, we attempt to formalise the value of advertising by using a growth model commonly used to decompose the drivers of economic development.

2.2.1 Results

We find that, for every extra dollar spent on advertising in 2015, GDP is expected to increase by around 13 cents (in addition to the extra dollar spent) in the following year. If the increase in advertising expenditure is sustained, the long run impact will be greater.

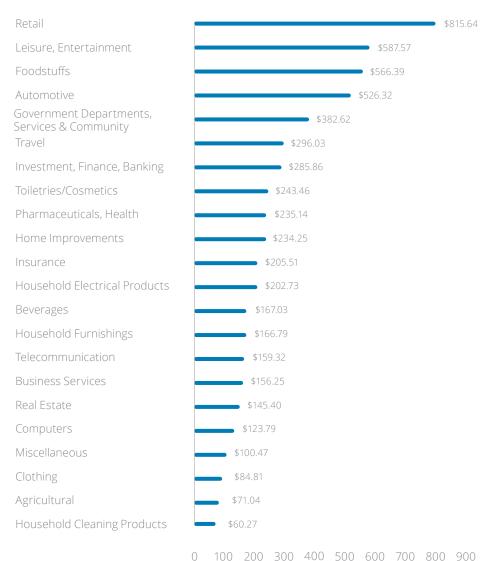
As discussed in Chapter 1, advertising benefits come through a number of channels. It facilitates increased competition in the market, improves information provision for consumers, encourages innovation, and ultimately increases productivity in the economy. To better understand the magnitude of these benefits, we modelled a scenario under which advertising expenditure fell by around 95% to see what would happen to the economy if the industry did not exist.

Using this hypothetical, we find that the annual⁵ contribution of advertising to the economy is around 2.4% of New Zealand's GDP. This means that New Zealand's economy is around \$6 billion larger each year than it would otherwise have been as a result of advertising.

These benefits can also be attributed across industries, presented in Chart 2.2, based on advertising expenditure estimates provided by Nielsen AIS (2015). In particular, we note that the retail, leisure and entertainment, and foodstuffs industries are the three largest advertising sectors in New Zealand, together experience one third of advertising economic contribution.

This breakdown is based on advertising industry sectors rather than ANZSIC industry sectors. While it is likely that advertising intensity contributes to innovation and growth in particular sectors, there are also likely to be flow-on effects through supply chains. For example, advertising by the retail sector will contribute to competitive forces that affect a range of supply chain industries such as agriculture and manufacturing.

Chart 2.2 Contribution of advertising to GDP by industry (\$ million), 2015



Source: StatsNZ (2016); Deloitte Access Economics calculations

^{4.} Based on an assumed 3% GDP growth rate.

^{5.} Over the period from 2000 to 2015.

2.2.2 Approach

The key challenge in this analysis is to accurately isolate the contribution of advertising to GDP from other growth factors. As previously discussed, advertising can boost economic growth by improving the efficiency of market interactions between business and consumers, through the provision of information that in turn generates competition. However, it is not uncommon for other growth factors, such as the growth of internet usage, to cause simultaneous increases in GDP and advertising expenditure, as shown in Figure 2.2. For example, the internet has increased the marginal benefit and decreased the marginal cost of advertising activities.

In other words, though advertising expenditure and GDP are correlated, this is not sufficient evidence to conclude that advertising causes higher economic growth, given the presence of other economic factors driving the growth. Precise model specification and robust application of statistical techniques are necessary to account for various growth factors that are correlated with advertising to ensure that the benefits of advertising are not overstated.

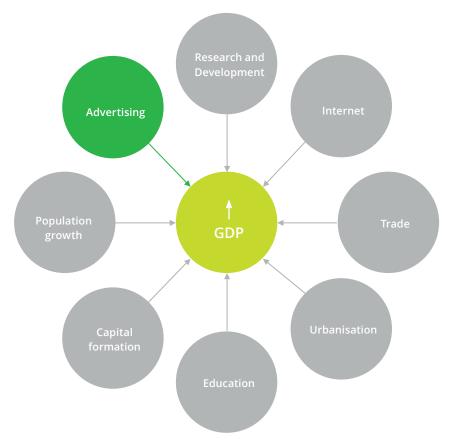
In this paper, we attempt to formalise the value of advertising by using a growth model commonly used to decompose the drivers of economic development.

Specifically, we diffuse the effects of advertising on economic growth using a neo-classical production function. The formal framework for this approach was first set out by Mankiw, et al. (1992) and later augmented by OECD (2001). The framework models economic growth using a set of inputs including labour, human capital and physical capital, as well as a measure of economic efficiency that captures the influence of technological progress and market development, such as the level of urbanisation.

We supplement this framework by incorporating advertising as a driver of economic efficiency. The augmented neoclassical growth model specification can be found in Appendix A. This approach is also similar to techniques used by OECD (2013), Czernich et al. (2009), and Qu et al. (2016) to calculate the economic value of digital technologies.

The data upon which this model is based compares paid advertising expenditure and a range of macroeconomic variables for 35 developed countries from 1990 to 2015. In addition to New Zealand, the sample included countries such as Australia, Belgium, Canada, Denmark, France, Japan, South Korea, the Netherlands, Switzerland, the United Kingdom, and the United States. The sample selection process excluded potential additional countries on the basis of major structural changes or geopolitical factors that would be likely to bias the results.

Figure 2.2 Drivers of GDP growth



The data was collected from a range of sources, including ZenithOptimedia, the World Bank, the OECD, and the UNESCO.

Our model uses advertising expenditure as a proportion of GDP as a measure of advertising intensity. However, this is likely to underestimate advertising intensity. For example, digital advertising can be less costly than more traditional mediums to produce and distribute – so while the amount of advertising activity may be rising, expenditure levels may not be growing as strongly. The model cannot account for lower cost advertising over time.

2.2.3 Consumer surplus

There are types of welfare which are not captured in GDP. The value of advertising derives from its ability to inform consumers, expand the range of goods and services that individuals are knowledgeable of and able to locate, and improve convenience. Some of these are not readily captured in GDP, because they are not associated with revenue.

An alternative concept economists use to measure this value is 'consumer surplus', which is defined as the difference between what a consumer is willing to pay for a product and the product's market price. Non-market benefits such as increased convenience and choices are captured by consumer surplus, so it gives a broader measure of benefits arising from advertising.

As the best possible outcome for consumers is to maximise their utility, the ability of individuals to more efficiently consume goods, services, and entertainment according to their heterogeneous preferences is also of inherent value, although not fully captured in revenue measures.

2.2.4 Non-market sectors

The effect of advertising is pervasive across all parts of the economy. Measures of economic development such as GDP are often poor indicators of value among the non-market sectors of the economy, which include:

- public sector administration and safety;
- education and training; and
- · health care and social services.

Advertising can increase the productivity and efficiency of these sectors and improve non-market interactions such as the awareness of government services and the way they are delivered to individuals, as discussed in more detail in Section 4.8.

For example, in health care and social services, advertising delivers value by raising awareness about health related topics such as consumption of alcohol and smoking, whilst in public administration and safety, advertising targets dangerous driving behaviours and domestic and family violence. This goes beyond benefits at the individual level. Advertising of health and safety information has the potential to change behaviour, and thereby significantly reduce health and safety risks for the general public and the overall cost of providing health services.

Putting this in context, expenditure on health in New Zealand was estimated to be 9.4% of GDP in 2015 (OECD, 2016). Health care is also the second largest public expenditure category for the Government, estimated to be around \$15.6 billion in the 2015/16 National Budget. Thus, even small health and safety behavioural changes brought about by advertising can have a substantial impact on the economy. Although not quantified here, further discussion of the benefits of government advertising to promote behavioural change is presented in Section 4.8.

2.3 Costs of advertising

While advertising is a significant driver of economic growth and creates value for consumers, it is important to recognise that it also imposes costs on consumers. For example, time spent watching, listening and reading advertisements represents a significant opportunity cost to the consumer.

There are instances where, given the choice, consumers would prefer not to view advertising. As of May 2015, 200,000 New Zealanders were using 'ad-blocking' software to avoid viewing advertising on their computers (StopPress, 2015). Further, the New Zealand Marketing Association keeps a 'do not call' and a 'do not mail' list which consumers can elect to be a part of.

Misleading or offensive advertisements can lead to erroneous perceptions and dissatisfaction among consumers, inducing decisions that ultimately decrease individual or social welfare. In 2015, there were some 707 advertising related complaints lodged with the Advertising Standards Authority, 299 of which were about misleading adverts. Of these, 34% were upheld (Advertising Standards Authority, 2015).

It is also worth noting that in rare cases, advertisements could have significant costs through encouraging problematic behaviours. For example, literature has found that promotional activities for smoking were causally related to the onset of smoking in adolescents (Pierce et al. 1998). More recently, there have been concerns about the promotion of alcohol, gambling, and sometimes food.

Advertising could also play a role in consumerism, the chronic consumption of goods and services that are beyond an individual's true demand – which can have significant environmental and social consequences. However, a longitudinal survey undertaken by Lysonski et al. (2003) suggests that consumerism has become less problematic over time.

The paper measured consumer sentiment and attitudes to marketing and consumerism by surveying New Zealanders in 1986 and 2001. It found that consumerism and marketing issues in New Zealand have become less problematic over time, and consumers felt more positive towards marketing in 2001 than in 1986. They hypothesise that this is because legislation and regulation has become more advanced over this period and so consumer issues are addressed more effectively than before.

The empirical relationship between advertising and broader consumer welfare is somewhat mixed among academic literature and has been debated for a long time. For example, Tremblay and Tremblay (1995) suggest that heavily advertised brands are more expensive for final consumers than less-advertised goods within the same product class. This is consistent with the 'pervasive' view of advertising, where firms can build artificial brand loyalties using advertising, and price their product at a premium. In contrast, Steiner (1993) provides evidence that advertising by manufacturers shifts power from retailers to manufacturers, reducing retail margin and overall price paid by consumers.

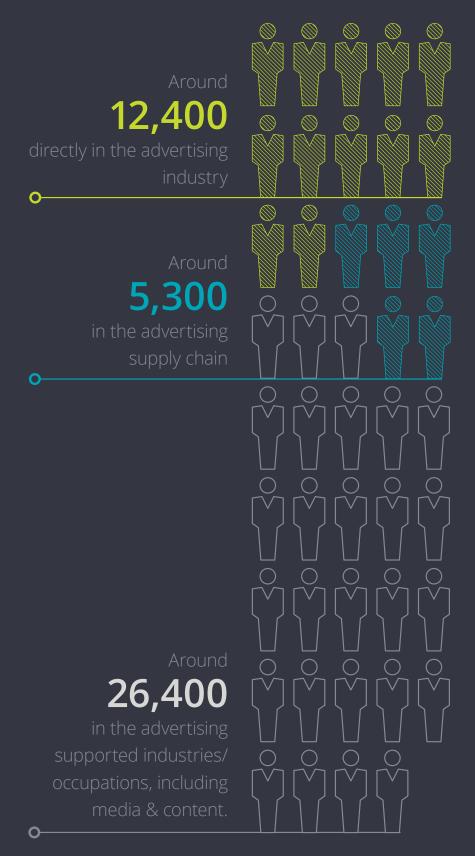
Tellis and Amber (2007) summarise the situation when they conclude that, given that advertising has conflicting effects on price, an overall relationship cannot be deduced on theoretical grounds alone, with the effect of advertising likely to be dependent on a range of characteristics including product, brand, market, and consumer preferences. These firm level effects of advertising are not the focus of this research, with our focus instead on the impact of advertising on overall economic efficiency.

Regulators and industry bodies play an important role in managing these costs and impacts of advertising. Although the costs of advertising have not been quantified in this analysis, it is considered unlikely that the costs of advertising would be sufficient to exceed the benefits delivered for the economy each year.

Employment impact of advertising



44,000 jobs supported by the advertising industry including....



Employment impact of advertising

New Zealand businesses spent an estimated \$2.4 billion on advertising in 2015. This is a conservative figure, only including media advertising channels, and not the cost of production, as discussed in more detail in Chapter 2. This spending supports employment in New Zealand through three main channels:

- **Direct employment** a count of all New Zealanders who work directly in the advertising industry or provide advertising services in other industries.
- Direct spending by businesses and government on advertising supports people to work in the advertising industry, in businesses such as advertising agencies, direct mail advertising services, advertising placement services, media agencies, and advertising space selling.
- It also supports employment in other businesses, where in-house staff can work in roles which involve planning advertising, creating advertisements, devising and coordinating campaigns, and incorporating advertisements into content.
- Indirect employment a count of individuals who are employed in supplying inputs for the advertising industry.
- Direct spending on advertising (estimated at \$2.4 billion) flows through in part to other industries, because the advertising industry spends money on inputs from other industries.
 For example, agencies buy services from printing companies and market research services.

- · Advertising-supported employment
 - a count of individuals who are in occupations or sectors where advertising is a major source of revenue, such as television broadcasters.
- Advertising agencies buy spaces
 to advertise in, such as on radio,
 television, or billboards. Further,
 they may purchase services to create
 content, such as film production or web
 design. In some cases, particularly in
 the media industry, advertising is the
 primary source of revenue. As such,
 many of the jobs in these industries are
 supported by advertising.

Figure 3.1 The employment impact of advertising

For every...

















people employed in advertising...

...one is employed in the **supply chain**

and four are employed in supported industries

Source: Deloitte Access Economics

Figure 3.2 shows how these three elements all contribute to an overall picture of how advertising supports employment through the New Zealand economy.

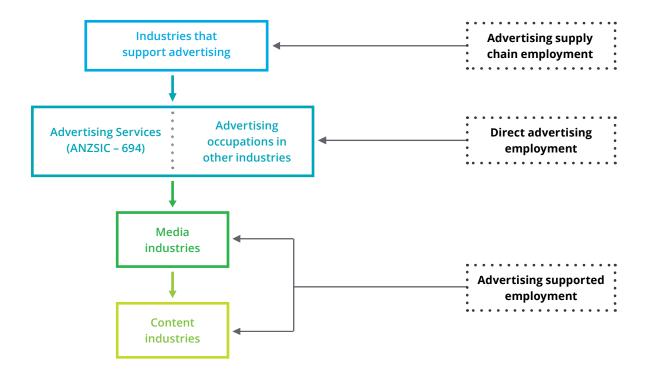
In 2013, there were 44,174 New Zealanders employed in jobs across these three categories. While this component of the analysis does not address the hypothetical scenario where all advertising is removed from the economy, the employment impacts of advertising are nevertheless pervasive throughout the economy today.

3.1 Direct advertising employment

In total there were 12,412 full time equivalent jobs in the New Zealand advertising industry in 2013. This figure is made up of two types of advertising professionals: those who work in the advertising services industry, and those who work in other industries but in occupations dedicated to advertising. In New Zealand's case, there were 5,436 people working in the advertising industry, and 6,976 employed as advertising professionals in other industries. This was calculated using 2013 census data from StatsNZ which broke down all New Zealand employment by industry and occupation.⁶ Our approach

is described in more detail below.

Figure 3.2 Components of the employment impact of advertising



^{6.} The data included full time and part time employment, so final results were provided as a full time equivalent (FTE) figure. This was done by multiplying the ratio of FTE to total employment for the 'Professional, scientific and technical services' ANZSIC subdivision, which includes the advertising industry (StatsNZ, 2013).

3.1.1 Advertising services industry employment

The first component of direct employment is those people who work directly in the advertising industry. This was the number of jobs recorded under industry code M694000 "Advertising Services", which totalled **5,436 jobs** in the 2013 census.

Within the advertising industry, there are those who work in 'core advertising' occupations, and those who work in supporting roles. The 'core' advertising occupations we identified are based on Deloitte Access Economics' 2016 Advertising Pays Australian report:

- Advertising Managers Individuals who "plan, organise, direct, control and coordinate advertising activities within an organisation" (ANZSCO 131113).
- Copywriters Individuals who "design and compose written material to advertise products and services" (ANZSCO 212411).
- Advertising Specialists Individuals who "devise and coordinate advertising campaigns which encourage consumers to purchase particular goods or services" (ANZSCO 225111).

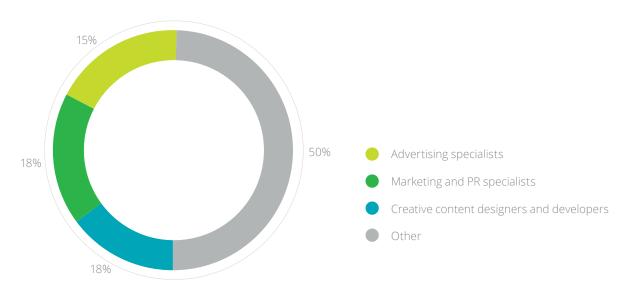
 Classified Advertising Clerks - Individuals who "receive and record advertising copy for publication and broadcasting" (ANZSCO 561911).

As Figure 3.3 shows, only 15% of those employed in the advertising industry work in these core occupations as advertising specialists. An additional 18% work as marketing and public relations specialists, and a further 18% work to design and develop creative content (for example as graphic designers). The remaining 50% work in supporting roles such as specialist business managers and ancillary occupations (such as accounts clerks, finance managers, and personal assistants).

3.1.2 Other industry employment

There were **6,976 jobs** in advertising positions in industries other than advertising in 2013. Census data revealed that there were 973 professionals working in the previously defined 'core' advertising occupations in other industries through the economy. However, it is important to recognise that in the same way that these core occupations require support in the advertising industry, there will be people in roles outside those defined as core advertising occupations whose roles are dedicated to advertising in other industries.

Chart 3.1 Breakdown of advertising industry employment

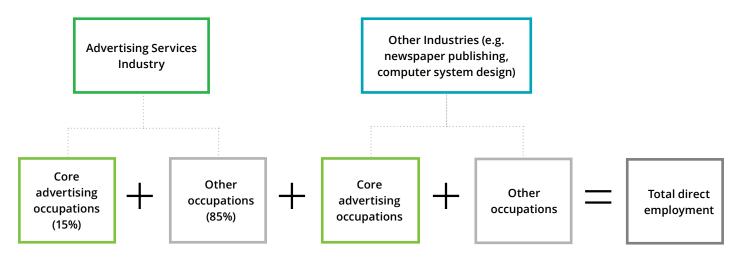


Source: StatsNZ (2016)

That is, a portion of people employed as specialist business managers and in ancillary roles in other industries are actually working in advertising, and these jobs also need to be included in the analysis.

Accordingly, we use the ratio of employment in core advertising occupations to other occupations within the advertising services sector to estimate the total direct employment of advertising in New Zealand (as shown in Figure 3.4 below).

Figure 3.3 Method for calculating total direct employment in advertising



Combining these four sources of employment, we find that there were 12,412 full time equivalent jobs directly resulting from advertising in 2013 (see Table 3.1).

Table 3.1 Total direct advertising employment

Profession	Advertising industry	Other industries	Total
Core advertising professions	758	973	1,731
Other advertising professions	4,678	6,003	10,681
Total	5,436	6,976	12,412

Source: StatsNZ (2016)

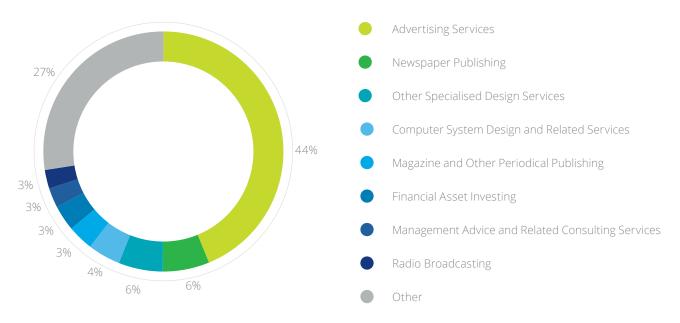


Chart 3.2 Direct advertising employment in core occupations, 2013

Source: StatsNZ (2016)

As Chart 3.5 demonstrates, the majority (56%) of core advertising jobs were in industries other than advertising services.

3.2 Advertising supply chain (indirect)

Advertising services rely on a range of inputs from other industries to create a final product. This primarily includes content development, but also involves other business services such as travel, human resources and recruitment, computer equipment, and legal and accounting services. Thus, advertising expenditure leads to spending by the advertising industry, and this demand has a flow-on benefit to employment in other sectors.

To quantify this employment, we use inputoutput analysis – a standard approach which uses analysis of economic linkages between sectors – to determine how every dollar spent on advertising flows through to purchases in other sectors. Stats NZ input-output tables were combined with employment figures from the 2013 census to estimate a direct and indirect employment multiplier for the New Zealand advertising industry.

The current New Zealand input-output tables aggregate advertising, market research, and management services under one industry, somewhat limiting the degree of precision. Nevertheless, given the degree of similarity between these three industries, the employment multiplier for these combined industries is likely to reasonably reflect the advertising industry alone. We found that, in total, 5,341 FTE employees are indirectly employed in New Zealand as a result of the advertising industry. That is, for every two people directly employed in advertising, there is almost another one person indirectly employed in the advertising supply chain.

3.3 Advertising-supported industries and occupations

Many businesses – particularly those in the media industry – make a significant proportion of their revenue from selling advertisement space. This is particularly pronounced in services which are provided to consumers for no cost, like free-to-air television and radio. The advertising industry helps support employment in downstream industries, such as newspaper publishing and television broadcasting, by providing a consistent and ongoing source of revenue.

We identified a range of key industries which rely heavily on advertising revenue based on Advertising Pays Australia (2016a). These included newspaper and magazine publishing, television and radio broadcasting, search engines, and cinemas, as well as content generation such as motion picture production, software publishing (including mobile apps), and sportspeople.

In total, we estimate that in 2013 there were over 26,400 full-time equivalent employees who were supported, in some way, by the advertising industry, as set out in Table 3.2. Individuals working in the advertising occupations were removed from this calculation to avoid double counting. As such, this is in addition to the direct employment set out above.

Table 3.2 Employment in advertising supported industries and occupations

Advertising supported industry/ occupation	Total Industry Employment	Less: direct employment	Total Industry employment less direct	Full-time equivalent employment
Media				
Television	2,781	151	2,630	2,383
Newspaper publishing	4,614	860	3,754	3,401
Search and directories	8,589	-	8,589	7,782
Classified				
Display				
Mobile				
Radio broadcasting	1,830	344	1,486	1,346
Magazine publishing	1,914	473	1,441	1,306
Mail (addressed & unaddressed)**	48	-	48	43
Cinema	1,449	-	1,449	1,313
Total	21,225	1,828	19,397	17,575
Content				
Motion picture & video production	3,615	108	3,507	3,178
Sports admin services	1,968	-	1,968	1,783
Sportspersons (occupation)	2,136	-	2,136	1,935
Music publishing and sound recording	264	-	264	239
Software publishing	327	-	327	296
Video post-production	1,368	-	1,368	1,240
Motion picture & video distribution	192	-	192	174
Total	9,870	108	9,762	8,846
All industries and occupations	31,095	1,935	29,160	26,421

^{**}Industry employment was calculated as Directory and Mailing List Publishing Source: StatsNZ (2016)

However, not all of this employment can be attributed to the advertising industry, because the extent to which these industries rely on advertising as a source of revenue varies.

As an indication, we have calculated the reliance of specific media industries on advertising. We use StatsNZ data to determine the industry's total revenue. Then, we determine the share of revenue that comes from advertising using data from the Advertising Standards Authority (2014). These figures include agency commissions which accrue to advertising agencies, not each industry under consideration. Commissions tend to be around 10% to 20% of the advertisement price (Everbrave, 2013). Since commissions are not known, the revenue figures were unadjusted and therefore could be slightly higher than they would otherwise be.

We then calculated the proportion of total revenue that comes from advertising for each industry, as shown in Table 3.3 below. It is important to note that the industry categories provided below do not directly map to those in Table 3.2.

3.4 Summary of employment impacts

In 2013, 12,412 FTE individuals were directly employed by advertising in New Zealand. Using New Zealand input-output tables, we estimate that a further 5,341 FTE employees are indirectly employed as part of the adverting industry's supply chain. Furthermore, 26,421 FTE individuals were employed in occupations supported by advertising revenue.

In total, there were over 44,000 full time equivalent jobs associated with the advertising industry in 2013.

Table 3.3 Advertising-supported employment

Advertising supported industry/ occupation	Total industry revenue (\$m)	Industry revenue from advertising (\$m)	Advertising share of industry revenue
Television	1,378	634	46.0%
Newspapers	886	494	55.8%
Interactive	650	471	72.5%
Radio	329	267	81.1%
Magazines	357	211	59.1%
Cinema	1,721	8	0.5%
Total	5,321	2,085	

Source: StatsNZ (2016),

Advertising Standards Authority (2014)



Advertising and business

Advertising is an important component of a business's corporate strategy, allowing businesses to engage with customers and spread their messages to a wide audience.

Clearly, organisations in New Zealand recognise the benefits of advertising. In 2015, advertising expenditure was \$2.4 billion – and this doesn't include the costs of production, as discussed in Chapter 2. Indeed, many businesses invest in having an in-house advertising capability (most commonly a marketing department), with 6,976 advertising professionals employed in industries outside of advertising services, as detailed in Chapter 3.

Many businesses see advertising as a way of promoting products and brands or boosting revenue. However, New Zealand has one of the most creative and effective advertising industries in the world, as discussed in detail in Section 4.6 below. Indeed, in April 2016, three New Zealand agencies ranked in the top 25 agencies globally by effectiveness (measured by the number of Effie award winning campaigns, and the value of awards earned) (Effie, 2016). As such, this Chapter details some key insights around how investing in advertising can be an effective means of achieving broader business goals.

4.1 Key insights

Consultations with businesses throughout New Zealand have revealed seven key insights into the purpose and effectiveness of advertising. These insights are especially useful for business leaders making decisions about the use of advertising.



4.1.1 Advertising helps deliver business objectives

Advertising, at its core, is about generating revenue for businesses – whether it be through driving sales or helping to grow market share.

And it can be a very effective mechanism. The average return on investment (ROI) was \$17 in sales for every \$1 spent on advertising amongst 2016 Effie winning advertising campaigns in New Zealand (Nielsen & CAANZ, 2016).

Beyond revenue, advertising can support other business objectives – like improving brand awareness or affecting behavioural change. As such, the effectiveness and success of advertising can be measured in a number of different ways.

4.1.2 Advertising has a role to play in corporate strategy

As consumers have access to more information about products and services, and become increasingly sophisticated at contextualising information, it is more important than ever to ensure that those products, services, and also customer experiences deliver clear and consistent expressions of a firm's brand.

Advertising agencies have broad market knowledge, and their strong understanding of consumer needs and wants means they are valuable at all stages of the production line, from product design to product promotion. It is well recognised that advertising agencies are very effective at crafting messages to sell products, but what is sometimes less well appreciated is that they can also provide value at earlier stages. Collaborative leadership at the executive level and involving an advertising agency at the product design phase allows businesses to maximise the potential of advertising as an effective business strategy tool.

4.1.3 Advertising is an investment in brand

In a world with increasingly more choice available to consumers, brand can be an essential ingredient for market differentiation. It can be a business's most valuable asset, providing an effective way to build market share and grow a business. In 2012, New Zealand's top 10 brands were collectively estimated to be worth \$4.7 billion by Brand Finance based on the value companies would be willing to pay to licence their brands if they did not own them.

As a highly visible and direct form of brand communication, recognising advertising's strategic role is critical in tailoring content and the planning of its delivery. Agencies help businesses to convert their brand's unique value proposition to real financial outcomes for a business – by building customer awareness, shaping perceptions, encouraging first time use and supporting ongoing loyalty.

4.1.4 Know your customers and the best channels to reach them

Increasingly, the effectiveness of advertising is determined by how well it is targeted; content alone is no longer enough to ensure success. Digital platforms and increasingly sophisticated capabilities in analytics have created valuable opportunities for business to invest with great accuracy in online advertising, and track translation to sales with greater speed and reliability.

However, this should not disregard the role for traditional channels, which continue to be effective in building a differentiated brand. There remains significant opportunity for generating higher reach through these forms of media. The right mix will vary according to the strategic objectives of a business; agency expertise can help to ensure maximum impact. Rarely will a one-channel strategy – digital or otherwise – serve a brand's best interests.

4.1.5 Creativity is critical for advertising

The success of a marketing campaign depends not only on how well it is targeted and the combination of channels selected, but on the extent to which content conveys an engaging message that audiences retain. Creative advertising is more likely to connect with audiences on an emotional level. Portraying the role of business through a 'human' lens remains important for communicating the values behind a brand, an area of increasing importance for consumers when determining their loyalty over the longer term.

New Zealand's advertising agencies are repeatedly recognised on the world stage as being state of the art. Over the past decade agencies from New Zealand have won 150 'pencils' (trophies awarded for excellence in creativity and design) from the prestigious D&AD organisation (2016a). New Zealand businesses should ensure they harness this creativity in designing their campaigns to ensure they are as effective as they can be.

4.1.6 Don't overlook other audiences

Advertising that is focused on building awareness of a brand's greater purpose and meaning can not only strengthen customer relationships, but can also positively impact on employee engagement, talent attraction, supply chain connections, and shareholders.

Data from various sources ascribes greater success and momentum to organisations whose employees understand its purpose. Advertising that purpose within and outside a business delivers broad benefits over the longer term including the amplifier effect of creating advocates across the ecosystem of a brand.

4.1.7 Advertising can achieve broader social objectives

When used as an element of integrated public awareness campaigns, government-sponsored advertising on public media is an established and proven powerful influencer of audience behaviour.

This can be from reducing costly behaviours such as gambling, to encouraging exports and investment (for example tourism).

Public sector advertising is, at its best, employed transparently in the pursuit of outcomes for the public good, and considered as a bona fide tool in the arsenal of policy making as part of a complementary, integrated suite of measures.

4.2 Advertising helps deliver business objectives

Advertising, at its core, is about generating revenue for businesses by helping to sell and distribute the products they make. Although advertising agencies can add value to businesses in many other ways, its central aim is to promote business sales, awareness, and help grow market share. And it can be very effective at achieving this goal. For example, the average return on investment (ROI) was \$17 for every \$1 spent for Effie winning advertising campaigns in New Zealand in 2015 (Nielsen & CAANZ, 2016).

Annabelle Fowler, General Manager of Market Development and Retail Sales at Air New Zealand knows that advertising is essential in order to compete in the market. "Everyone is competing for customers. The challenge is to work out how to use advertising to compete most effectively – how to attract attention, and to convert to sales."

Beyond direct sales, advertising can be very effective at achieving a range of other business objectives. Indeed it is often used to achieve broader purposes – of the 99 finalists in the New Zealand 2016 Effies, nearly two thirds listed their primary goal as something other than improving sales.

Advertising can achieve a range of business objectives, from increasing market share, improving brand engagement, to inspiring behavioural change and even launching a new brand

Air New Zealand

Retail Advertising is firmly embedded in Air New Zealand's business. Instead of forming a separate department, marketing functions are embedded within each business unit.

According to Annabelle Fowler, General Manager of Market Development and Retail Sales, advertising is critical to retail success in the aviation industry. "Everyone is competing for customers. The challenge is to work out how to use advertising to compete most effectively – how to attract attention, and to convert to sales."

Air New Zealand's 'grabaseat' website is one example, with more than 28,000 visitors daily. On its tenth birthday, the site advertised 1,000 domestic flight tickets for \$10. Within one hour of the birthday deals being placed on the site, 60,000 people had visited – more than double the daily average.

A customer-centric strategy is key to making investment decisions about advertising. "You need to clearly define your objective and target market. What are the behaviours of your customers? What are the barriers they face? Once you understand this, you can design a creative campaign that strongly delivers to the need of your identified market," explains Fowler.

And Air New Zealand has first-hand experience of how creative retail advertising can be more effective. Air New Zealand often utilises its sponsorship agreements to leverage retail sales and add some differentiation into its creative.

Beyond creativity, advertising needs to effectively deliver on the stated objectives. "Before every campaign, we consider the level of investment required, and the estimated return, with a view to previous campaigns," says Fowler.

The effectiveness of a campaign might be measured in terms of various metrics – like the number of bookings, and revenue.

But Fowler notes that a 'last-click' model, where a sale is attributed only to the last step in the process, can be problematic. "A combination of media channels contribute to any given sale, so the last click may not be representative. To overcome this we try to attribute sales to the various channels."

Fowler notes that traditional media channels still have a powerful role to play. "The trick is to design a channel mix which collectively maximises your investment, delivering on reach, engagement and ultimately conversion."

Depending on the objective of an advertisement, different metrics can be used to measure its effectiveness. For example, advertisements which are aimed at improving sales might be assessed by their impact on sales volumes, whereas those which are aimed at improving brand awareness might be measured through consumer surveys, or questions to customers during the check-out experience. Alternatively, businesses might use a range of interim measures - for example, the level of foot traffic (in store) and online traffic (interest in the website) are often used as a way to gauge whether advertising has led to an increase in awareness and interest in the business.

However, it can be difficult to measure the exact impact of advertising, because a range of other factors might influence these measures. For example, sales volumes might be affected by product offerings, and brand awareness could be influenced by owned and earned advertising, not just paid media advertising.

New Zealand advertising and media agencies are particularly effective at designing and running advertising campaigns, as is discussed further in Section 4.6.

As noted in the case study opposite, Air New Zealand has found that incorporating advertising into each business unit, rather than having a separate department, is the most effective way to ensure advertising delivers on business outcomes.

4.3 Advertising has a role to play in corporate strategy

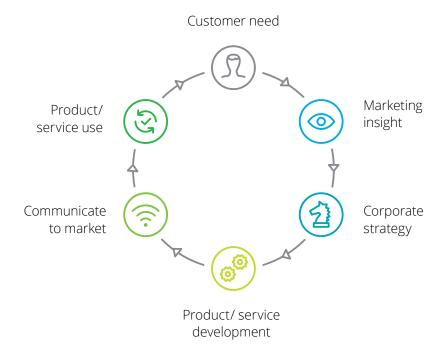
In a competitive market economy, differentiation is key to business success. Firms seeking to build their market share – or even just preserve their existing position – must continually ensure that their products and services are fulfilling customer needs, whilst maintaining an edge over their peers.

Creatively designed advertising is one of the ways in which firms can do this. Agencies can help businesses to identify and design products that consumers want, communicate their value proposition, and deliver on business objectives.

The activities of the marketing and communications professionals within any business are both an input to corporate strategy and a mechanism to achieve the objectives of that strategy, as shown in Figure 4.1.

Understanding customers – their preferences, needs, and desires – is critical for business success. But these insights are not static; as customer preferences change, so too must strategy and products. Innovation and adaptability are critical for business success. In fact, Deloitte Access Economics has previously estimated that businesses which are focused on innovation are 7% more likely to achieve above average revenue growth (Deloitte Access Economics, 2016b).⁷

Figure 4.1 The role of marketing and communications in corporate strategy



Source: Deloitte Access Economics (2016a)

^{7.} This result was achieved by analysing a sample of approximately 3000 firms from 2005-2011, monitoring which firms survive and grow over a five year period, and then comparing their attributes to those firms which failed.

At the same time, it is critical for businesses to communicate with potential customers and provide information on how and why their product or service can meet their needs. This process is ongoing, as firms adapt to changes in the needs and preferences of consumers over time.

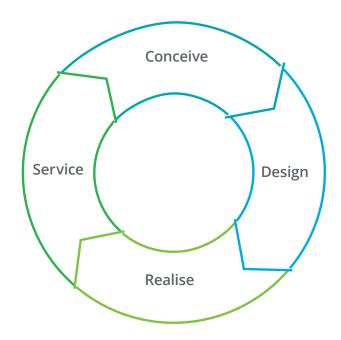
Advertising must therefore both inform and align with broader strategic objectives. Where this is not the case, the effectiveness of advertising can be limited, with the potential for detrimental impacts on brand. As shown earlier, over 1,000 professionals who are directly employed in the advertising industry are not only involved in advertising, but specialise in marketing and PR, which can provide a deeper understanding and insight into business strategy. Thus, there is a significant missed opportunity for businesses who confine their engagement with advertising and media agencies to content and creative services only.

Advertising and media agencies can assist with all phases of the product lifecycle (shown in Figure 4.2). The breadth of agencies capabilities goes beyond pure advertising; it ranges from user experience design to data analytics, from packaging to e-commerce. Agencies can help businesses during the conception phase to conceptualise products that will address a real gap in the market, and assist with the design phase by offering insights into the mind of the consumer and developing products that will sell.

They are crucial to the realisation phase of product management, as they develop a plan to market and distribute the product to maximise its appeal, and they can also assist with the servicing phase, collecting data on sales patterns and adjusting marketing strategy in response.

One example of advertising professionals being involved with strategic planning early on in the process is Holden NZ. According to Marnie Samphier, Chief Marketing Manager, "Our advertising agency is an extension of our team, they are involved from day one. This ensures that what they come up with is integrated with the rest of the business, and this benefits our staff as well as our customers."

Figure 4.2 Product lifecycle management



Source: Teresko (2004)

Further, advertising agencies need to be continuously involved through the process, not just at inception. Marnie Samphier reflects that, "Reviewing our advertising strategy and determining what is working is essential. We meet with our agency monthly to talk about how we can maximise the effectiveness of our advertising, and staying relevant is definitely a very dynamic process."

Advertising professionals know what will work, and how best to achieve results. The following case study on Holden's advertising strategy demonstrates how early involvement and regular contact enhance the effectiveness of advertising, and ultimately business performance.

Businesses that treat advertising agencies as trusted advisors will get more value than those who only use them for the marketing stage of the design process.



Holden

In a world where competition is fierce, brand eminence and strategy is key to standing out from the crowd. For Holden NZ, advertising plays a central role in delivering this. "We use advertising to drive sales, to grow our reputation, and to strengthen our brand" explains Marnie Samphier, Chief Marketing Manager of Holden NZ. "Advertising forms a big part of how we communicate what we offer and who we are. Increasing sales is only a small part of this overall strategy."

With an increasing number of channels – owned, paid, and earned – through which to advertise, it can be difficult to determine an optimal mix. According to Samphier, "The mix of channels is a complicated decision. In the past we have arbitrarily allocated spend between various channels and waited and hoped we had the right split and overall results were achieved."

Advertising channel decisions all boil down to one question for Holden NZ, "What is the best way to carve up the advertising budget to make sure we get the best results?" With the help of their agency, Holden NZ have begun to employ econometric modelling to assist in this decision making process. "It's a pilot trial to see what the optimal model is for splitting the spend between channels. You define the audience and budget and the model calculates the split between television, digital and social. Then we sense check. It requires a lot of planning".

However Samphier notes that increasing digitalisation has led to Holden rationing their spend between TV and digital. "Five years ago Holden's spend on digital was around 15% of our advertising budget. Today it's more like 30%, which is all at the expense of television."

Beyond traditional paid-for advertising, Holden is using sponsorships to drive engagement and support brand. They provide sponsorship to a variety of organisations and causes, including golf, cycling, rallying, and road safety. "We want to engage with New Zealanders and participate in the things that they love", says Samphier, "It's a strategic move that's a win for all parties involved."

For Holden, understanding the impact of advertising and how it delivers on its purpose is crucial. It uses a range of metrics and techniques to monitor this, including data analytics. "Through website engagement and traffic navigation tools we can see a clear correlation between an advertising launch and market enquiries.

Online, this is generally immediate but there is a two week lag for traffic in showrooms."

But Holden does not focus solely on monitoring how advertising impacts on sales. Holden NZ also uses data analytics to track their brand and understand the impact of their advertising.

"We do regular brand tracking research as well as a monthly digital review and 24/7 social media listening.

This gives us immediate feedback from campaign launches, changes in market sentiment and changes in brand equity. It's a useful tool because it allows us to see if our advertising has delivered on its intention."

Holden NZ works closely with their agency in all aspects of their advertising strategy. "Our advertising agency is an extension of our team, they are involved from day one. This ensures that what they come up with is integrated with the rest of the business, and this benefits our staff as well as our customers." Holden feel there are real benefits to working solely with agencies. Samphier notes that, "I've never used in-house capabilities because I believe these are quite specialised skills that are best sourced from a great agency. I regard my team more as having general skills, and expertise in automotive marketing.

4.4 Advertising is an investment in brand

Although advertising costs are treated as an operational expense for accounting purposes, it is important for business leaders to recognise that through its role in the execution of corporate strategy, advertising is ultimately an investment in brand.

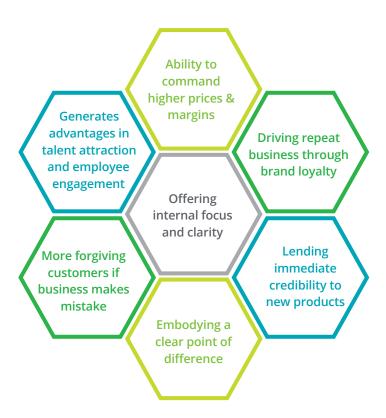
The concepts of brand equity, or brand value are well established. Firms began to acknowledge the influence of brands on financial performance in a period that Interbrand calls the 'Age of Value', beginning in the late 1980s (Interbrand, 2017). It is now widely accepted that brand differentiation can help organisations to demand higher prices, support the strength and sustainability of consumer demand for its products, and facilitate employee engagement and talent attraction.

Under the international standard for monetary brand valuation, brand is defined as:

"A marketing-related intangible asset that may include names, terms, and logos that are intended to identify goods and create distinctive images and associations in the minds of stakeholders, thereby creating economic benefits for the owner."

ISO, 2010

Figure 4.3 Benefits of effective brand management



In the changing economy, businesses rely on brand as a sustainable point of difference from their competitors; while the features of a product or service offering can be replicated by others, brand is harder to imitate. The potential benefits that can be delivered by a strong brand are illustrated in Figure 4.3.

The most successful businesses put their brand at the heart of their organisation. They do not tack on brand at the end of their corporate strategy as a tool in a sales and marketing strategy, or use it as a tag line. Instead they have a clear purpose as an organisation, a common vision central to the firm and its employees. Brand is central to both internal and external discussions. Having a clear brand and a clear purpose helps businesses to align their external brand with their internal corporate brand.

Brand Finance calculates brand value by determining what a company would be willing to pay to license its brand if it did not own it. Using this method, Brand Finance valued New Zealand's top 10 brands at a collective \$4.7 billion in 2012,8 and the importance of brand goes beyond business.

Brand is not only relevant to individual companies. A strong national brand can help to establish a strong economy. Brand Finance (2016) ranked New Zealand as having the 6th strongest national brand in the world, worth \$237 billion, and consistently ranks New Zealand in the top 10 national brands. Brand Finance annually rates each country's national image (or brand) by assessing performance across three key pillars: goods and services, investment, and society. These raw performance marks are then weighted and aggregated up to give an overall brand strength index which is then used to value the brand. New Zealand's national brand in 2016 was rated AAA, on par with the highest ranked national brands in the world.

Businesses in New Zealand are able to leverage off that strong international reputation, and it is clear that continuing to invest in that brand is beneficial for the New Zealand economy as a whole.

However, brand is an intangible asset. While there are methodologies and an international standard for quantifying brand value (ISO, 2010), it is difficult to isolate the contribution of advertising to brand amongst the broader range of operational factors that also influence customer experience and brand perceptions.

Nevertheless, this link is well established in the literature. Studies have shown that advertising reinforces the beliefs and attitudes of consumers in relation to brands and positively influences consumer perceptions and brand buying behaviours (Shimp, 1997; Reynolds and Phillips, 2005).

The relative importance of advertising for brand value will vary by industry, and also fluctuate with the outcomes of specific campaigns. Although the value of brands and the impact of advertising on this can be hard to quantify financially, it is vital that business leaders do not discount or disregard its potential importance. For example, Kevin Bowler, former CEO of Tourism NZ states that "Our brand is our business, New Zealand's international reputation as a beautiful, natural destination is how we get people interested."

^{8.} Deloitte Access Economics has not produced this estimate or reviewed the methodology underlying it.

Tourism NZ

The \$15 billion tourism industry in New Zealand utilises advertising heavily. "Our whole business is advertising. Our job is to be an ideas house; to plant the seeds of a dream of a trip to New Zealand, and then to follow a visitor all the way through," explains Kevin Bowler, former CE of Tourism NZ.

Bowler notes the importance of understanding where each prospective visitor is in their journey. "We see three key stages – dreaming, planning and converting. Once we know what stage a visitor is at, we can provide them with information which better suits their individual needs," explains Bowler, "People respond well to a sequence of messages. For example, you begin the advertising 'campaign' by launching a beautiful video of NZ. The next stage is to let the audience know where this was taken. The final stage is showing them how easy is it for them to go see it. Sequential messaging and retargeting are having massive impacts on conversion".

Critical to the initial stage of the advertising process is brand.
According to Bowler, "Building our brand is essential our business, New Zealand's international reputation as a beautiful destination is how we get people interested."

This strategy has been successful for Tourism NZ, which has contributed to year-on-year growth in international visitor spending. However, it's important to be mindful of all stages of the customer journey, rather than focusing on a single part of the supply chain. "We have key partnerships with other businesses who will provide us with insight into what's working and what's not.

We have strong partnerships with the airlines for example. They can help us to understand why a booking wasn't followed through and we can react from there. You need to follow up the path to conversion, otherwise it won't have any impact."

According to Bowler, advertising need not be considered only through traditional lenses which focus only on a medium. Tourism NZ has invested heavily in unpaid advertising, which promotes New Zealand by driving aspirations. "We recently had a Chinese superstar getting married in Queenstown. During this time, when you walked down the street in China, two out of three magazines had the bride and groom on the cover with Queenstown as the backdrop."

The type of advertising Bowler is talking about is PR advertising, a strategic type of advertising that builds mutually beneficial relationships between organisations and the public. "This type of advertising is highly cost effective, but it takes a lot of effort to get right. It's the pre-dreaming tier – building ideas in people's minds where they may not have given much thought previously."

To get the greatest return on advertising investment, Bowler thinks that businesses need to move away from conversations about content and focus more on context. "We used to put all our effort into designing advertising which was captivating. However, by making sure advertising is appropriately targeted – that the right people are seeing it at the right time in the right medium for them – can be a more cost effective way of delivering a more powerful message."

Knowing who your target audience is, is also important. "We don't focus on the unaware – the people who are not interested in coming to New Zealand" says Bowler. "The chance of converting this group is low and therefore wasted effort. Focusing on those who are already open to travelling and who have the resources to do so is much more effective."

Bowler explained how technology has had a huge impact in the world of advertising. "Digital has enabled us to engage our advertising efforts with our prospective visitors in more ways than we could imagine." Analytics has been key in identifying which advertising efforts are effective for Tourism NZ and to what extent. "We can see that there is a 65% difference in tourism between a group that has been advertised to and a group that hasn't. We also know that people go to 17 websites on average before they make a decision on their purchases."

But analytics has its limits due to the lag time between consideration and action. Whilst this may make it harder to see the immediate results of an advertising effort, Bowler said Tourism NZ's use of market trackers can help to counter this. "Market trackers are great because they provide insight into attitudes towards New Zealand and help us to determine peoples' intentions and abilities to travel."

4.5 Know your customers and the best channel to reach them

Digital technology has meant that consumers are more exposed to information than ever before. They engage more frequently with a broader range of channels then ever:

- 3.2 million New Zealanders listen to radio every week (Nielsen, 2016);
- 3.5 million New Zealanders watch TV every week, 69% via a television set (Nielsen, 2016);
- almost three-quarters of adult New Zealanders own or have access to a private laptop or notebook (Research New Zealand, 2015); and
- 3.1 million New Zealanders (70%) own a smartphone (Research New Zealand, 2015), and the proportion of New Zealanders who accessed the internet with their smartphone has grown rapidly, from 38% in 2013 to 56% in 2015 (Nielsen, 2016).

To reach customers effectively in this fragmented media market, it is critical to understand their needs and what they respond to, as well as organisational objectives, before choosing a medium through which to advertise.

Organisations are increasingly attracted to online advertising, particularly the use of mobile and social platforms. Nearly **nine out of ten online New Zealanders use social media** (Nielsen, 2016). There is no doubt that this can be very cost-effective in both reaching specific customer segments and translating awareness into sales. However, the expectation for relevant content is higher online than in traditional advertising (Magnetic, 2015) which can make it harder for businesses without targeted advertising to be successful.

Digital advancement has also paved the way for increasingly sophisticated audience identification and targeting.

Web analytics can be used to monitor the online habits of consumers, and advertising agencies can use this to more accurately identify the target audience for a product. Farahat and Bailey (2012) find that targeted advertising is more costeffective than non-targeted advertising in terms of the number of brand related searches the advertisement generates. Similarly, search histories and online loyalty programs provide a rich data source not available in traditional mediums. This data can then be used to generate relevant advertising content to better meet the needs of consumers, and match them more efficiently to products they are interested in.

However, it is important to remember that traditional advertising channels, including TV, radio, print, and outdoor placements, still play a critical role in driving awareness and tell a compelling story through a 'human' lens. This is important for promoting a business's purpose, as well as driving long-term outcomes.

Rather than a single solution, channel selection requires a tailored approach consistent with business strategy. Dave Elliott, General Manager of Marketing at Mitre 10, emphasises that, "the right mix of channels is essential. We use a range of different media to advertise, the balance is shifting all the time to keep up with what consumers respond to."

Beyond this, the right advertising method is dependent on the phase of the sales cycle. Customers unfamiliar with a business and just starting to consider a purchase will be responsive to different advertising to a customer already loyal to a brand. For example, Tourism NZ use different advertising formats for potential tourists depending on the stage of trip planning they are in. According to the former CEO, "We see three key stages – dreaming, planning and converting. Once we know what stage a visitor is at, we can provide them with information which better suits their individual needs."

This has important implications for the design of advertising campaigns because customers are more loyal to their need in the moment than they are to brands (Forbes, 2014). The implications of mobile and advanced data analytics for marketers is that they can address a real customer need, respond to their customer's intent and be more relevant than ever before.

Similarly, 'native advertising' – advertising content which is integrated into the display of other published or broadcast content – will be most effective where it matches consumer preferences and interests.

The changing media landscape provides greater opportunities for the value-add potential of advertising. As long as media continues to support interactivity and engagement between people, there will be a role for advertising, through the development of engaging creative content, to participate in the conversation between businesses and consumers, across the different platforms.

Advertising and media agencies act as independent channel advisers for businesses. They can offer an objective opinion as to which combination of channels will be most effective for an individual advertising campaign. Advertising agencies can offer industry knowledge across the full range of channels available. Therefore, businesses using an agency may benefit from campaigns which are well-targeted and channel appropriate.

4.6 Creativity is critical to advertising

The success of a marketing campaign depends on the extent to which content conveys an engaging message that audiences retain. Creativity is crucial to connecting with audiences and leaving a strong impression. Portraying the role of business through a 'human' lens remains important for communicating the values behind a brand, an area of increasing importance for consumers when determining their loyalty over the longer term.

The importance of creativity in advertising is not just abstract. Research shows that creative advertising is more effective at helping businesses achieve financial goals.

The Institute of Practitioners in Advertising (2012) found a direct correlation between creative advertising and campaign success - and thus business performance. The study used a meta-analysis to assess the effectiveness (ability to increase sales, profit, and loyalty) of almost 1,000 advertising campaigns over 30 years. It found that **campaigns that were** creatively awarded were 11 times more efficient at delivering business success (in terms of excess share of voice)9, and the more creatively awarded the campaign, the more effective it becomes (Field and Binet, 2012). In the long-term, emotional, creative campaigns are most effective

Additionally, a survey of over 300 consumers in the UK found that advertising campaigns that are perceived to be original, creative and different are associated with greater brand awareness and positive brand associations (Buil et al., 2011).

and successful.

Cadbury in 2007 launched a famously creative campaign, 'Gorilla, Eyebrows, and Trucks'. The campaign focused on joy instead of persuasion; 'Gorilla' simply featured a person in a gorilla costume playing the drums, with the only hint of the Cadbury brand being the purple backdrop for the gorilla, and the logo at the conclusion of the ad. It captured people's attention, and resulted in an **ROI of 4.88 to 1** (Warc, 2017).

More recently, a New Zealand creative agency designed an innovative campaign to raise awareness of domestic violence, particularly among higher income households. The 'It's not OK' magazine campaign was awarded a D&AD yellow pencil for outstanding creativity in 2016.

"The great benefit of creativity is it drives this 'buzz' around your brand. Creative ads are more likely to be shared, passed on, and virally moved about. That is very strong in terms of effectiveness over slightly longer periods of time."

Field, quoted in Cameron (2013)

^{9.} The report measures business success as growing a business's excess share of voice (ESOV). ESOV is a marketing term referring to the relative market share of a business and their 'voice' in the market (how well they are known).

Figure 4.4 'It's not OK' magazine campaign



Source: Adweek (2015)

This creative campaign involved a partnership with one of New Zealand's most well-known magazines, 'Home'. It played out as a feature showcasing a new designer home in an upmarket suburb, but each image had a subtle hint that everything was 'not OK' in the home. Blood stains on a white table, a broken vase in the corner of the shot, an upturned barstool. It is not until the final page of the article that the purpose of the ad is revealed: "Family violence can happen in any home... No matter what street you live on, family violence is not OK."

The advertisement started a conversation on a national scale; in one week, 1.1 million New Zealanders had seen the advertisement, and the government website dedicated to domestic violence saw a **15% increase in inquiries** (D&AD, 2016b).

The creative advertising industry in New Zealand is globally competitive. New Zealand is home to some of the most highly awarded and regarded agencies, networks and campaigns. Cannes Lions presents annual awards for outstanding creative work, ranking it on elements such as design, content, and effectiveness. New Zealand creative work consistently performs highly in these award ceremonies. Indeed, in 2015 Auckland ranked fourth in the Cannes Lions Global Creativity Report as a highly creative city – ahead of hubs like Tokyo, Bangkok and Sydney.

New Zealand's advertising agencies are repeatedly recognised on the world stage as being state of the art. Over the past decade agencies from New Zealand have won 150 'pencils' (trophies awarded for excellence in creativity and design) from the prestigious D&AD organisation (2016a). New Zealand businesses should ensure they harness this creativity in designing their campaigns to ensure they are as effective as they can be.

1st London 6th
New York 20th Tokyo
Mumbai 13th 4th
San Paulo

Figure 4.5 Creative cities around the world

Source: Cannes Lions (2016)

4.7 Don't overlook other audiences

The benefits of advertising do not stop with customers. Building a strong brand can also help with employee engagement and talent attraction by showcasing the purpose and culture of the business. Our consultations with businesses emphasised the importance of advertising messages that are authentic, linked to the culture and values of the business, and aligned with corporate strategy.

Beyond this, a strong brand impacts positively on supply chain connections and shareholders. Chemmanur and Yan (2010) found that "an IPO firm could increase its offer price to gain a valuation premium of 1.5% to 3% relative to its intrinsic value if it increases its advertising intensity by 1%." This finding was based on the dispersion of analysts' earnings forecasts and stock turnover in the IPO aftermath for IPO firms 1990-2000. Businesses that advertise their purpose within and outside the business reap the rewards of long term advocates of their brand across the supply chain.

Interviews with business leaders reinforce that the benefits of advertising extend to employees, shareholders and other stakeholders, such as suppliers or franchise owners. Dave Elliott of Mitre 10 recognises that there is even a financial benefit from advertising to staff, "When we take our staff through e-learnings, sales increase further, reaching up to 65% because staff are more equipped to help our customers."

Advertising to a business's own employees might seem unnecessary, but consider that almost one in ten employees in the New Zealand economy are employed as sales workers (StatsNZ, 2016). Informing and engaging with customer-facing staff can be an effective way of engaging and communicating with customers.

Mitre 10

Mitre 10 has adopted a brand-persona as a 'helpful mate', which it feels allows it to connect with its audience on a whole new level. Dave Elliott, former General Manager of Marketing at Mitre 10, says "Kiwi culture is something unique and special, and we're proud to produce compelling and effective advertising that speaks to that culture. It's about being relatable to your audience."

For Mitre 10, its focus has been on changing attitudes as well as behaviour. Elliott explains, "Our brand is about home improvement. It's about helping Kiwis, whether they be trade or retail customers, to feel good about home improvement, inspiring them to get into DIY with the right equipment and celebrate a job well done."

Mitre 10 has three key brand drivers: Inspire, Inform, and Equip. For example, Mitre 10's "key communications are developed to align with one of our brand drivers. We want to inspire people to get stuck into DIY. To do this we help build peoples' confidence by teaching them how to do specific activities. This is where the inform part comes in and where our Easy As campaign has been such a success." The Easy As program provides Kiwis with the information, tools and materials they need to get stuck into DIY.

Smart advertising has translated into a direct increase in sales, advertising is responsible for about one third of Mitre 10's business. "You can clearly see the cause and effect – a couple of days after launching an ad we see sales increase by 15%."

For Mitre 10, it is important not to forget internal audiences, like staff. "When we take our staff through e-learnings, sales increase further, reaching up to 65% because staff are more equipped to help our customers."

When it comes to choosing channels to advertise through, Mitre 10 knows that it is important to be responsive. Elliott points out "Retail is a response to culture; if advertising isn't responsive, you become irrelevant".

Investing in advertising which can reach and engage the right audiences with a lower cost can bring big business benefits. For Mitre 10, this has meant a shift towards digital. "Digital is becoming a lot cheaper now," explains Elliott. "Whereas it use to cost \$10 per minute for a video, now you will only pay \$2 per minute." The payoffs from this are noteworthy. "Between 2011 and 2015, the ratio of Mitre 10's percentage spend on advertising to their market share dropped from 54% to 53%." In simple terms, Mitre 10 was able to increase market share with a lower spend on advertising – a win-win.

Owned advertising on digital media platforms such as YouTube and Facebook is increasingly important to Mitre 10's strategy. "We have shifted our focus within channels to maximise engagement with DIYers" explains Elliott. But getting the content right is still important. A recent experiment using the 'live' feature on Facebook reaffirms Mitre 10s stance on this. "Through this platform we can engage with customers directly. It's an instant communication channel that enriches the whole customer experience and reach. You just can't get this type of engagement on traditional platforms."

"Our brand is about home improvement. It's about helping Kiwis, whether they be trade or retail customers, to feel good about home improvement, inspiring them to get into DIY with the right equipment and celebrate a job well done."

Dave Elliott

Former General Manager Marketing, Mitre 10

4.8 Advertising can achieve broader social objectives

Advertising can also play a significant role in achieving government objectives, particularly in public health and safety, educating consumers about their rights and informing them of key social and environmental issues. In 2015, the New Zealand Government spent \$211 million on campaign advertising media (Nielsen, 2016). This expenditure was split across a range of channels, including TV, radio, press, magazines, digital, out-of-home, and cinema, with the largest spending public sector departments and agencies being health, education, and transport (New Zealand Treasury, 2016).

However, the benefits of successful public health and safety advertising are realised over the long term in behavioural changes and ultimately improved health outcomes. As such, it can be difficult to isolate and quantify the impact of these campaigns. Despite these challenges there is strong evidence of the effectiveness of advertising campaigns alongside other public policy measures, for example the drink-driving campaign 'Legend', described below.

4.8.1 'Legend' – New Zealand Transport Agency

The New Zealand Transport Agency has been running drink-driving advertising campaigns for over 20 years, with great success. In the first 5 years that these ads were run, drink-driving related crashes fell by 40% (Ministry of Transport, 2015).

These campaigns typically focus on the consequences of drink-driving, depicting brutal crash scenes to discourage people from driving under the influence. However, these ads did not seem to resonate as strongly with young male drivers as with the rest of the population: they were the only demographic group without a decreasing road toll.

In response to this, the Transport Agency held focus groups which revealed that while young men understood the dangers of drink-driving, they still made bad decisions after drinking, and friends felt uncomfortable speaking up to discourage them from driving home. Out of this, the drink-driving campaign 'Legend' was born.

The campaign focused on empowering young men to speak up and tell friends not to drive after they had been drinking, it broadened the responsibility of preventing drink-driving from just drivers to those who could help stop it. It depicted a young man internally debating whether to speak up at a party when a friend is about to drive home. He knows he should say something, but worries about the social implications for himself, and the risk of "looking dumb". When he does speak up, the drunk friend agrees not to drive, and the party goes on as before. The aim of the ad is to "externalise an internal battle", and labels those who tell a friend not to drive a "bloody legend" – a part of the solution, not the problem.

Figure 4.6 'Legend' drink-driving campaign



Source: The Wireless (2014)

The campaign ran for three years and was highly successful: the number of young people caught over the limit halved, and number of young people involved in serious crashes on the roads every year fell from an average of 214 before the ad, to 145 after the ad. Over the course of the campaign the number of young drivers killed also fell, with an estimated 64 lives saved over the three years following the launch of the campaign. This equates to a cost saving for society of roughly \$290 million (Clemenger, 2015),10 and, considering the total spend on the campaign was \$3.6 million, represents a significant pay-off. Other factors such as changing social norms and improving education rates likely also contributed to the falling road toll, but even as one of several factors, the ad campaign's benefits are clear.

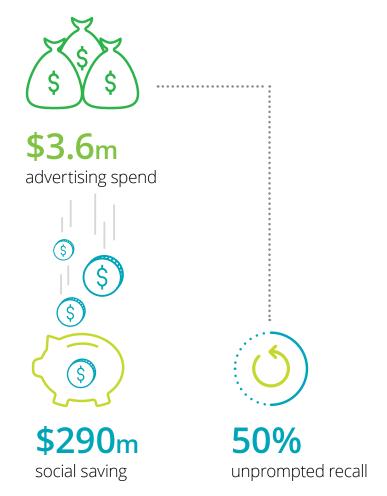
This success is partly attributable to the mediums used to launch the campaign. The ad was first played on television the night of the Rugby World Cup Final in 2011, a night where many people would be out drinking and watching the game with friends. Given the ad aims to change decision making at the crucial moment when someone picks up the keys to drive home, and get someone else to speak up, this was an ideal opportunity to launch the ad.

In addition to television, the ad was on billboards, radio channels, bar runners and coasters, and printed on beer packaging. Social media was not originally expected to play a large part in the campaign, but the ad was shared on social media quickly, its popularity creating momentum, reinforcing the message, and ultimately reaching far more people than would have otherwise been achieved.

By the end of the campaign, there were hundreds of Facebook pages, dozens of YouTube mash ups, countless memes, a hit song and music video, and T-shirts and other merchandise dedicated to the 'Legend' campaign. This, along with the 50% unprompted recall rate achieved, speaks to the strength of the campaign in reaching young drivers.

This is just one example of effective advertising helping to address a social issue, there are multiple other areas where advertising can help to achieve broader social objectives, such as highlighting the dangers of smoking, speeding, depression, and house fires.

Figure 4.7 The 'Legend' campaign





Conclusion

Advertising is important in the New Zealand economy. It drives economic growth through increased information provision, market competition, innovation, and ultimately productivity. More than that, it can drive positive behavioural change throughout a community.

New Zealand is internationally recognised as a creative leader, advertising agencies are well regarded and are repeatedly awarded on the world stage. Leveraging the creativity in these agencies can pay large dividends for businesses, government, and the economy broadly.

Across the economy, we estimate the annual impact of advertising to be 2.4% of GDP, \$6 billion. This is a significant value, roughly equivalent to what tourists spend in New Zealand every six months. It is also a significant employer, with over 44,000 jobs associated with advertising, including over 12,000 people directly employed in advertising.

Consultations with business leaders have revealed key insights for business as to how to maximise the effectiveness of advertising.

Businesses should recognise that advertising has a role to play in corporate strategy and is an investment in brand, and therefore involving an advertising agency early in the design process is essential for creating the best product. Targeting the right audience in the right way is important to advertising's success, and agencies know the market, they can help businesses design advertisements likely to succeed.

Consultations also revealed the positive impact that advertising to other audiences such as suppliers and staff on morale, engagement, and performance. Finally, government objectives can be aided by advertising. Advertising has a wide reach and can portray safety messages effectively, as in the case of the powerful and effective drink-driving campaign 'Legend'.

References

Advertising Standards Authority New Zealand

- 2015, Annual report, http://www.asa. co.nz/wp-content/uploads/2015/05/ASA-Annual-Report-2015.pdf.
- 2014, New Zealand Advertising Industry Turnover, http://old.asa.co.nz/industry_ turnover/Advertising%20Industry%20 Turnover%20Table%20and%20 Notes%202013.pdf.

Ashley, R, Granger, C, & Schmalenesee, R 1980, Advertising and aggregate consumption: an analysis of causality, Econometrica, vol. 48, no.5, pp. 1149-1167.

Association of New Zealand Advertisers 2015, Video: What are the Key Challenges for the Marketing Industry Today?, posted 17th May 2015, http://www.anza.co.nz/Story?Action=View&Story_id=489, accessed 12th October 2016.

Australian Bureau of Statistics (ABS) and Statistics New Zealand

- 2006a, Australian and New Zealand Standard Classification of Occupations (ANZSCO), ABS Catalogue No. 1220.0, http://www.abs.gov.au/ausstats/abs@. nsf/mf/1220.0.
- 2006b, Australian and New Zealand Standard Industrial Classification (ANZSIC), ABS Catalogue No. 1292.0, http://www.abs.gov.au/ausstats/abs@. nsf/mf/1292.0.

Bagwell, K

- 2007, The economic analysis of advertising, Handbook of industrial organisation 3: 1704-1844.
- 2005, The economic analysis of advertising, http://web.stanford. edu/~kbagwell/Bagwell_Web/ adchapterPost082605.pdf.

BandT Magazine 2015, Ritson vs Social Media, Presentation at the World Marketing and Sales Forum, https://youtube/ S2NUayn2vP0.

Bassanini, A, & Scarpetta, S 2001, The Driving Forces of Economic Growth: Panel Data Evidence for the OECD Countries, OECD Economic Studies, 33(2).

Binet, L, & Field, P 2012, The Long and the Short of It – Balancing Short and Long-Term Marketing Strategies, Institute of Practitioners of Advertising.

Bouis, R, Duval, R, & Murtin, F 2011, The Policy and Institutional Drivers of Economic Growth Across OECD and Non-OECD Economies: New Evidence from Growth Regressions, OECD Economics Department Working Papers, No. 843.

Brand Finance 2016, Nation Brands 2016, http://brandfinance.com/images/upload/nation_brands_2016_report.pdf.

Buil, I, de Chernatony, L, & Martinez, E 2013, Examining the role of advertising and sales promotions in brand equity creation, Journal of Business Research, vol. 66, pp. 115-122.

Bullmore, J.J.D, & Waterson, M.J 1983, Advertising Association Handbook.

Cameron, N 2013, Why creativity wins out over big data, CMO from IDG, http://www.cmo.com.au/article/466514/why_creativity_wins_over_big_data/.

Cannes Lions 2016, Cannes Lions announces global creativity report 2016 results, https://www.canneslions.com/press/press_releases/1303/cannes_lions_announces_global_creativity_report_2016_results/.

Chamberlin E 1933, The Theory of Monopolistic Competition, Harvard University Press. Chemmanur, T.J., & Yan, A 2008, Product market advertising, IPO valuation, and longrun stock returns. IPO Valuation, and Long-Run Stock Returns.

Clemenger 2015, 2015 Entry Form New Zealand Effie Awards.

Creativity-Online 2015, Something Sinister Hides in This Posh Home Magazine Spread, http://creativity-online.com/work/its-not-ok-home-magazine-paradise-hill/43464.

Czernich, N, Falck, O, Kretschmer, T, & Woessmann, L (n.d.), Broadband Infrastructure and economic growth, CESIFO Working paper, No. 2861.

Davis, S 2002, Brand Asset Management: how businesses can profit from the power of brand, Journal of Consumer Marketing, vol. 19, no. 4, pp. 351-358.

Delaney, A, Lough, B, Whelan, M, & Cameron, M 2004, A review of mass media campaigns in road safety, Report No. 220, Monash University Accident Research Centre.

D'Elia, A, Newstead, S, & Cameron, M 2007, Overall impact during 2001-2004 of Victorian speed-related package, Report No. 267, Monash University Accident Research Centre.

Deloitte Access Economics

- 2016a, Advertising Pays.
- 2016b, Westpac Businesses of Tomorrow Report.

Deloitte LLP

- 2015, Advertising pays 3: The value of advertising to the UK's culture, media and sport, report for the Advertising Association, http://www.adassoc.org. uk/wp-content/uploads/2015/01/ Advertising-Pays-3.pdf.
- 2014, Advertising pays 2: How advertising can unlock UK growth potential, report for the Advertising Association, http://www.adassoc.org. uk/wp-content/uploads/2014/09/ Advertising-Pays-2-How-advertising-canunlock-UK-growth-potential.pdf.

 2012, Advertising pays: How advertising fuels the UK economy, report for the Advertising Association, http:// www.adassoc.org.uk/wp-content/ uploads/2014/09/Advertising_Pays_ Report.pdf.

Doyle, P 2001, Shareholder-value-based brand strategies, Brand Management, vol. 9, no. 1, pp. 20-30.

Dukes, A 2008, Advertising and competition, in Dukes, A, Competition Law and Policy, p. 515.

D&AD

- 2016a, New Zealand, http://www. dandad.org/profiles/country/776935/ new-zealand/.
- 2016b, Paradise Hill, https://www. dandad.org/awards/professional/2016/ pr/25085/paradise-hill/.

Effie Worldwide 2016, Most Effective Agencies April 2016, http://www.effieindex.com/ranking/?rt=1.

Eng, LL, & Keh HT 2007, The effects of advertising and brand value on future operating and market performance, Journal of Advertising, vol. 36, no. 4.

Everbrave 2013, Why do Agencies charge, https://www.everbrave.ca/what-do-agencies-charge/.

Farahat, A, & Bailey, M 2012, How Effective is Targeted Advertising?. https://ssrn.com/abstract=2242311.

Fernandez, J 2010, Research finds strong advertising creativity is at the heart of business success, https://www.marketingweek.com/2010/06/17/researchfinds-strong-advertising-creativity-is-atheart-of-business-success/.

Forbes 2014, Consumers are no longer brand loyal, http://www.forbes.com/sites/glennllopis/2014/12/10/consumers-are-no-longer-brand-loyal/#64e29a306058.

Interbrand

 2017, The Four Ages of Branding, http:// interbrand.com/views/the-four-ages-ofbranding/. 2014, Best Global Brands 2014: Age of You, http://bestglobalbrands.com/?_ga=1 .22503867.1486648795.1432701730.

IBISWorld 2016, Industry Report M6941 Advertising Agencies in Australia.

Institute of Practitioners of Advertising, 2015, The Long and the Short of It, http://www.ipa.co.uk/Framework/ContentDisplay.aspx?id=9225.

International Organisation for Standardisation (ISO) 2010, ISO 10668:2010 – Brand valuation – requirements for monetary brand valuation.

Lysonski, S, Durvasula, S, & Watson, J 2003, Should marketing managers be concerned about attitudes towards marketing and consumerism in New Zealand? A longitudinal view, European Journal of Marketing, vol 37, issue 3.

Madden, TJ, Fehle, F, & Fournier, S 2006, Brands matter: an empirical demonstration of the creation of shareholder value through branding, Journal of the Academy of Marketing Science, vol. 24, no. 2, pp. 224-235.

Magnetic 2015, Magnetic Study Reveals Heightened Consumer Expectations for Personal Marketing, http://www.magnetic.com/press-release/magnetic-study-reveals-heightened-consumer-expectations-for-personal-marketing/.

Mankiw, G, Romer, D, & Weil, D 1992, A contribution to the empirics of economic growth, The Quarterly Journal of Economics, vol. 107, no. 2, pp. 407-437.

McKinsey & Company 2012, Advertising as an economic-growth engine: the new power of media in the digital age, http://www.iab-austria.at/wp-content/uploads/2013/03/2012_McKinsey_advertising-role-in-growth.pdf.

Media5 2015, What we do, http://media5.co.nz/media5-services/.

Milyo, J, & Waldfogel, J 1999, The Effect of Price Advertising on Prices: Evidence in the Wake of 44 Liquormart, American Economic Review, 1081-1096.

Ministry of Business, Innovation & Employment 2016, Key Tourism Statistics, http://www.mbie.govt.nz/info-services/sectors-industries/tourism/documents-image-library/key-tourism-statistics.pdf.

Ministry of Transport 2015, Motor Vehicle Crashes in New Zealand.

New Zealand Government 2016, Budget at a Glance: Investing in a Growing Economy, http://www.treasury.govt.nz/budget/2016/ at-a-glance/b16-at-a-glance.pdf.

New Zealand Treasury 2016, Analysis of Expenses by Functional Classification for the year ended 30 June 2016, http://www.treasury.govt.nz/government/financialstatements/yearend/jun16/18.htm.

Nielsen AIS 2016, Industry breakdown of advertising spend.

Nielsen 2016, Media Trends 2016: How New Zealanders consume newspapers, magazines, TV, radio & digital content.

Nielsen 2009, Maximise the return on your advertising spend, http://www.nielsen.com/us/en/insights/news/2009/maximize-the-return-on-your-advertising-spend.html.

Nielsen & CAANZ 2016, Great Campaigns Transform Businesses.

Organisation for Economic Co-operation and Development (OECD)

- 2016, Health expenditure 2016, http://stats.oecd.org/Index. aspx?DataSetCode=SHA.
- 2013, Measuring the internet economy: a contribution to the research agenda, OECD Digital Economy Papers, no. 226, http://dx.doi.org/10.1787/5k43gjg6r8jfen.
- 2001, The driving forces of economic growth: Panel data evidence for the OECD countries, OECD Economic Studies, no. 33, pp. 9 – 56, http://www. oecd.org/eco/growth/18450995.pdf.

Outdoor Media Association of New Zealand 2012, Aggregate number of sites by format, http://www.omanz.co.nz/wp-content/uploads/2010/12/Aggregate-number-of-sites-by-format-FINAL-FEB-12.pdf.

Peirce, J, Won, S, & Gilpin, E 1998, Tobacco Industry Promotion of Cigarettes and Adolescent Smoking, Jama 297, no. 7.

Qu, J, Simes, R, & O'Mahony, J 2016, How do Digital Technologies Drive Economic Growth?.

Research New Zealand 2015, A Report on a Survey of New Zealanders' Use of Smartphones and other Mobile Communication Devices 2015.

Reynolds, Thomas, J, & Carol, B Phillips 2005, In search of true brand equity metrics: all market share ain't created equal, Journal of Advertising Research Vol 45, Issue 02, pp. 171-186.

Shimp, TA 1997, Advertising, promotion and supplemental aspects of integrated marketing communications, 4th ed., Orlando, Florida, Dryden, in Yoo B, Donthu N & Lee S 2000, An examination of selected marketing mix elements and brand equity, Journal of the Academy of Marketing Science, vol. 28, no. 2, pp. 195-211.

Statistics New Zealand (StatsNZ)

- 2016, Customised report. Statistics New Zealand 2016, Tourism Satellite Account: 2016 - Media Release, http://www.stats.govt.nz/browse_ for_stats/industry_sectors/Tourism/ TourismSatelliteAccount_MR16.aspx.
- 2015a, Screen Industry 2014/15
 National Tables, http://www.stats.govt.nz/browse_for_stats/industry_sectors/film_and_television/ScreenIndustrySurvey_HOTP14-15/Tables.aspx.
- 2015b, New Zealand Income Survey June 2015 quarter, http://www.stats. govt.nz/browse_for_stats/incomeand-work/Income/NZIncomeSurvey_ HOTPJun15qtr.aspx.
- 2010, Screen Industry in New Zealand 2009/10.

Steiner, R

 1993, The inverse association between the margins of manufacturers and retailers, Review of Industrial Organisation, Vol 8, Issue 6, pp. 717-740. 1973, Does Advertising Lower Consumer Prices, American Marketing Association Vol 37 no 4.

StopPress 2015, 200,000 Kiwis are using Adblock Plus; should advertisers be concerned?, http://stoppress.co.nz/news/200000-kiwis-using-adblock-plus.

Tellis, G, & Ambler, T 2007, The SAGE handbook of advertising.

Teresko, J 2004, The PLM Revolution, http://www.industryweek.com/companies-amp-executives/plm-revolution.

The Economist 2014, Daily Chart: The λόγος of logos, http://www.economist.com/blogs/graphicdetail/2014/09/daily-chart-4.

The Wireless 2014, A hard sell to stop mates driving drunk, http://thewireless.co.nz/themes/risk/a-hard-sell-to-stop-mates-driving-drunk.

Tourism New Zealand 2016, International tourism spend surpasses \$10 billion for the first time, http://www.tourismnewzealand.com/news/international-tourism-spend-surpasses-10-billion-for-the-first-time/.

Tremblay, C, & Tremblay, V 1995, Advertising, Price, & Welfare: Evidence from the U.S. Brewing Industry, Southern Economic Journal, vol.62, no.2, pp. 367-381.

Warc 2017, Cadbury Dairy Milk – The joy of content: how a new communications model is paying back for Cadbury.

Young, L, and Swinburn B. 2002, Impact of the Pick the Tick food information programme on the salt content of food in New Zealand. Health Promotion International, 17(1), pp.13-19.

ZenithOptimedia 2015, Advertising expenditure data and forecasts.



Appendix A: Economic modelling

Approach

With the emergence of digital marketing and online advertising capabilities there has been a renewed interest in the role of advertising in driving economic growth. While a number of empirical studies have established a link between advertising expenditure and economic activity, this analysis fills a gap in the evidence base by quantifying the benefits in the context of the New Zealand economy.

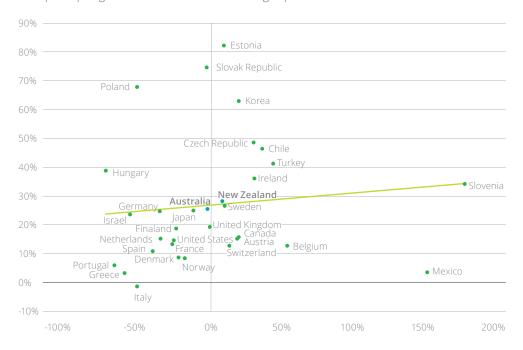
The key challenge in this analysis is to accurately isolate the contribution from advertising to GDP from other growth factors. Advertising can boost economic growth by improving the efficiency of market interactions between business and consumers, through the provision of information that in turn generates competition. While other factors, such as the growth of internet usage, could lift both GDP and advertising expenditure due to increased marginal benefit and decreased marginal cost.

In other words, the correlation between advertising expenditure and GDP, as illustrated in the following chart, does not immediately indicate the extent to which advertising causes higher economic growth, given the presence of other economic factors that drive growth. To account for this, we attempt to formalise the value of advertising by using a growth model commonly used to decompose the drivers of economic development.

Studies that focus on statistical-variance models (e.g. Granger causality) that estimate the ability of advertising to predict GDP growth fall short of addressing the true causal relationship between these variables. These models are statistical procedures that do not link back to the theories that underpin the role of advertising in the economy. Rather, the focus of these approaches is to identify whether one data series is useful in forecasting changes in another over time. This alone does not provide sufficient evidence to demonstrate a true causal relationship.

Real GDP and advertising expenditure growth, 1980 - 2015

GDP per capita growth 2000-2015 vs. Advertising Expenditure Growth 2000-2015



Source: Deloitte Access Economics, derived from OECD and ZenithOptimedia

In line with a large body of economic development literature, we seek to diffuse effects of advertising on economic growth using a neo-classical production function. The formal framework for this approach was first set out by Mankiw, et al. (1992) and later augmented by OECD (2001). We supplement this framework by incorporating advertising as a driver of economic efficiency. This approach is also similar to techniques used by OECD (2013) and Czernich et al. (2009) to calculate the economic value of broadband.

The standard neo-classical growth model is derived from a constant returns to scale production function with two inputs (capital and labour) that are paid their marginal products. Following closely to that presented in Bassanini et al. (2001), production (output) at time t is given by:

$$Y(t) = K(t)^{\alpha} H(t)^{\beta} \big(A(t) L(t)\big)^{1-\alpha-\beta}$$

Where Y, K, H and L are respectively output, physical capital, human capital, and labour, α is the partial elasticity of output with respect to physical capital, β is the partial elasticity of output with respect to human capital, and A(t) is the level of technological and economic efficiency.

Economic efficiency can include a range of 'enabling services', such as ICT and the digital economy, trade, transport and logistics, professional and support services, and innovation. These enabling services provide support to firms at all stages of production.

We incorporate advertising expenditure as a driver of economic efficiency, alongside research and development intensity, exposure to international trade, level of urbanisation, and internet usage (V).

$$\begin{split} A(t) &= I(t)\Omega(t) \\ \ln I(t) &= p_0 + \sum_j p_j \ln V_j(t) \\ \dot{\Omega}(t) &= g(t)\Omega(t) \end{split}$$

It can be shown that steady-state value of the capital inputs can be expressed as functions of their respective investment rate. Substituting the steady-state expression back into the production function and adopting a formulation using steady-state human capital, \hbar^* , consistent with previous research (Qu, Simes, and O'Mahony, 2016), the functional form of our growth equation can be derived as:

 $\Delta \ln y(t)$

$$\begin{split} &=\phi\left(-\ln y(t-1)+\left(\frac{\alpha}{1-\alpha}\right)\ln s_k(t)+\left(\frac{\beta}{1-\alpha}\right)\ln h(t)+\sum_j p_j\ln V_j(t)\right.\\ &\left.-\left(\frac{\alpha}{1-\alpha}\right)\ln (g(t)+d)\ln (n(t))+g(t)t\right.\\ &\left.+\left(p_0+\ln \Omega(0)\right)\right) \end{split}$$

$$+ \frac{1-\psi}{\psi} \left(\frac{\beta}{1-\alpha} \right) \Delta \ln h(t) + \left(1 - \frac{\phi}{\psi} \right) g(t)$$

The coefficient estimate ϕ represents the convergence parameter, which underlines the speed with which countries converge to their new steady-state output. The change in human capital $\Delta \ln \phi h(t)$ captures short term dynamics in the model to help isolate the persistent impacts of advertising from country-specific short-run effects. This augmentation is advantageous as it relaxes the assumption that countries are in their steady-states and that deviations from the steady-state are independent and identically distributed.

While we believe this approach is the best available to estimate the causal impact of advertising expenditure on growth, we recognise that some or all of the effect of advertising could be picking up the impact of other unobserved variables on economic growth. As such, the results here should be interpreted with an appropriate degree of caution. Further research could potentially draw on other empirical techniques such as natural experiments, for instance regulations that lead to differences in advertising over time, to further assess the relationship between advertising and economic growth.

Data

Following similar specifications in Qu, Simes, and O'Mahony (2016), we use a sample of 35 developed countries¹¹ between 2000 and 2015. Where appropriate, data is converted to constant 2010 US dollars using constant Purchasing Power Parity, consistent with OECD standards. The two tables below list the countries included in the data and the data sources used in the modelling.

Countries				
Australia	Greece	Portugal		
Austria	Hungary	Russia		
Belgium	Iceland	Slovak Republic		
Canada	Ireland	Slovenia		
Chile	Italy	South Africa		
China	Japan	Spain		
Czech Republic	Korea (South)	Sweden		
Denmark	Mexico	Switzerland		
Estonia	Netherlands	Turkey		
Finland	New Zealand	United Kingdom		
France	Norway	United States		
Germany	Poland			

^{11.} Luxembourg and Israel are removed from the original sample of 37 countries due to inadequate observations for the advertising expenditure variable

Data sources for modelling inputs

Parameter	Variable	Source	
<i>y</i> (<i>t</i>)	Gross domestic product per capita	OECD	
h(t)	Penn World Education Index	UNDP	
n(t)	Total population growth	OECD	
$s_k(t)$	Real private non-residential fixed capital formation (% of GDP)	OECD	
Advertising	Total advertising expenditure (% of GDP)	ZenithOptimedia	
Trade	Exports and Imports of goods and services (% of GDP)	World Bank	
R&D	Gross domestic expenditure on R&D (% of GDP)	OECD	
Urbanisation	Urbanisation (% of population in urban areas)	World Bank	
Internet usage	Percentage of individuals using the internet	ITU	
t	Time trend	-	

Advertising expenditure data for each country was collected from ZenithOptimedia, with corresponding macroeconomic data collected from publically available World Bank, OECD, and UNESCO data sources.

Following Qu, Simes, and O'Mahony (2016), we have adopted the pooled mean group estimator (PMG12) that allows intercepts, the convergence parameter, short-run coefficients, and error variances to differ freely across countries, but imposes homogeneity on long-run coefficients. A common set of long-run coefficients for the countries in our sample (mostly OECD countries) is a reasonable assumption given that countries have access to common technologies and have intensive intra-trade and foreign direct investment (all factors contributing to similar long-run production function parameters). Under the assumption of long-run slope homogeneity, the PMG estimator increases the efficiency of the estimates with respect to mean group estimators (Pesaran et al., 1999).

Formally, conditional on the existence of convergence to a steady-state path, the long-run homogeneity hypothesis permits the direct identification of the parameters that affect the steady-state path of output per capita.

We note that the PMG approach has one serious limitation, namely the large number of parameters to be estimated, causing likely convergence issues in some model specifications. In practice, this means considering more than three policy and institutional variables often proves to be difficult. Furthermore, PMG estimates are often very sensitive to the changes in model specification. Some studies have noted that the coefficient of human capital is dramatically reduced in some specifications (Bouis et al., 2011). Despite these limitations of PMG, it remains a superior approach for the purposes of this study.

ResultsThe results of the modelling are summarised below.

Parameter	Coef.	Std. Err.	Z	P>z	[95% Confidence Interval]	
Convergence						
lnS_k	0.318	0.020	15.860	0.000	0.279	0.358
ΔlnP	-1.670	0.323	-5.170	0.000	-2.304	-1.037
lnh	0.722	0.208	3.470	0.001	0.314	1.129
trend	0.003	0.001	2.560	0.010	0.001	0.005
InAdv	0.041	0.013	3.180	0.001	0.016	0.066
Internet usage	0.082	0.007	10.950	0.000	0.067	0.096
R&D	0.226	0.020	11.480	0.000	0.187	0.264
Urbanisation	-0.095	0.016	-5.780	0.000	-0.127	-0.063
Trade	-0.039	0.061	-0.640	0.520	-0.158	0.080
SR						
Convergence	-0.392	0.044	-8.910	0.000	-0.478	-0.306
Number of observations	525					
Implied share of physical capital	24.2%					

Source: Deloitte Access Economics

It can be seen that the coefficients on both physical and human capital appear with the expected sign and are highly significant. The implied share of physical capital according to the growth equation is broadly in line with national accounts and literature consensus (physical capital share of production is about a third).

The coefficient on the advertising variable is 0.041. On average, this implies that a 1% increase in advertising to GDP ratio increases GDP per capita growth by around 0.04%.

In real monetary terms¹³, advertising expenditure in New Zealand has increased by around \$335 million over the period from 2000 to 2015. According to our estimation, this has contributed around \$286 million to GDP (in addition to the increased expenditure of \$335 million) compared to the counterfactual where advertising expenditure stays at its 2000 level.

Additionally, every extra dollar spent on advertising in 2015 is expected to increase GDP by around 13 cents (in addition to the extra dollar spent) in the following year based on an assumed 3% GDP growth rate.

Long-run contribution

Our model can also be used to estimate the long run contribution from advertising with respect to a counterfactual scenario of very low advertising expenditure (as a percentage of GDP).

In the scenario under which advertising expenditure fell by around 95% from its existing value, 14 it is estimated that advertising's long-run15 contribution to the economy is around \$6 billion, equivalent to 2.4% of New Zealand's GDP in 2015.

^{13.} Real growth value based on constant 2010 US dollars with constant Purchasing Power Parity; the final figures are converted back to NZ dollar at 2015 price.

^{14.} The current share of advertising expenditure is close to 1% of NZ GDP.

^{15.} For the period from 2000 to 2015.

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